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Editorials

DEFECTIVE CHILDREN, THEIR CARE, OCCUPATIONS AND SUPPORT

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THE progressive mind of Dr. Helen MacMurchy has placed her in the van of all sociological movements in Ontario. Her recent fully detailed report gives some quite startling figures on the ratio of defectives to the population, showing that there has been culpable negligence somewhere, of late, in regard to this problem.

The cause of this sad condition should be thoroughly and promptly investigated. Amongst native Canadians it is due, among the well-to-do, to inbreeding, or marriage of those closely related in blood and tastes, while among the poor, it proceeds from too rapid production, ignorance and drunkenness or other physical crimes at the time of conception and gestation. The natural remedy is a law compelling eugenic marriages. But a large number of feeble-minded children are the offspring of foreign parents, and a close watch should be kept on the immigrants in obedience to the laws relating thereto.

People of means who have this pathetic condition to cope with should, and usually do, protect their child, especially if it is a girl suffering from weak mentality, providing teachers of probity and skill. However, since it is a very special branch of pedagogy, bordering on the profession of medicine, teachers require additional training, including skill in many manual occupations, having to endure as well that tedium of companionship so constantly that only a large remuneration and long vacation periods, with opportunities to seek an antidote for an otherwise morbid frame of mind are absolutely necessary. It includes in their category of good qualities the gentleness, patience and aptness of a nurse, since many of these children are burdened with some visible defect, such as being unable to walk well.

This expense for private teachers throws the burden of care upon institutions. The most modern way is to conduct a sort of school-hospital, on the cottage plan on a beautiful farm, with its tilled fields, its fringes of woods carpeted with wild flowers, its brooks and orchards, giving food for chickens and cattle.

There must be complete segregation of the sexes and not more than three or four children in one cottage, for they require constant watching. Their life must be robbed of the sombre gravity that invests large institutions. A being with a large sense of humor is more nearly normal than any other. These defectives lack the power to make real fun for themselves, and happiness should be the main motive of

their existence. It is the oil that makes them work well.

To be brief, the plan of such an institution is like that of the most modern hospital, including accommodation for visiting parents, suites for the teachers and resident physicians, lecture rooms for the teachers and resident physicians, lecture rooms for the children, or a summer school for physicians and shops for the manual vocations taught the inmates. Flanking these at respective distances come the flower beds, kitchen gardens, dairy, poultry yards, bake shops, laundry and other service buildings where the work is done by teachers and pupils.

On two hundred acres a well-conducted institution can produce enough to bear one-fifth of its expenses. One-fifth more comes from the sale of articles made in the shops, either to prisons and asylums, or to the general public, baskets, mats, light furniture and certain woven goods. One-fifth comes from the fees paid by the parents who can afford it—just as in the hospitals—usually about forty dollars per month. One-fifth comes from private philanthropy incited to action by industrious campaigning, and lastly one-fifth comes from the government.

Each public school teacher should be fairly familiar with the well known tests of Binet and others to establish the standard of mentality in cases where doubt exists. All the defectives should be given to one teacher, in each school district, and she should teach them to weave, paste pictures, sew buttons on strips, and to keep clean and happy.

Some parents hate to be told that they have a "defective" child. Gloss it over and call him "atypical," but show them that these weaklings require special care. Show them that, in an institution well-managed and well-supported, these children will be much happier and progress somewhat, while running no risks, and doing no damage to anyone else. There is no end to the dangers these atypical cases run, when on the streets of a metropolis.

The outlook is not good, if after a certain period of tuition, they still measure up to only about ten years in sense. Sterilization is warmly advocated for both sexes, so that their influence cannot be felt by future generations.

The administration of these institutions is modelled on that of the best hospitals, a staff of special physicians to come when needed, from the neighboring cities, a staff of lecturers to instruct the resident teachers, a board consisting of all the necessary social factors, business men, clergymen, etc., an auxiliary body of charitable ladies, who always succeed in raising much money, and best of all, a "live wire" for superintendent, who knows the science of his vocation and can also mingle with the children so as to be loved and copied by them.

In 1800, Itard studied the uncouth defectives in the province of Aveyron in France and thus founded the science. His pupil, Seguin, opened the first institution for their care. Since then Switzerland, England and United States followed his lead, their legislatures incorporating each under an act relating to

institutions not for pecuniary profit. It is to be hoped that many such will spring up here and there, to hold these weaklings safe, and that radical steps will be taken to prevent the increase of this class in this fair land.

BIRTHDAY HONORS

THE list of Birthday Honors conferred by His Majesty on his natal day, June 3rd, was satisfactory, except in so far that it did not include the name of any member of the Canadian medical profession. In this respect, the list was certainly disappointing. There are several outstanding members of the profession in Toronto alone who are deserving of such recognition and whose names we look forward to seeing published at no distant date. We feel that such is due our profession and express the hope that it will not be overlooked.

THE MAYO FOUNDATION

THE Mayo Brothers, of Rochester, Minn., have given the magnificent sum of $2,000,000 to the Medical School of the University of Minnesota, to be known as the Mayo Foundation. The nature and terms of the proposals have been submitted to the Board of Regents for affiliation of the Mayo Foundation with the Medical School of the University of Minnesota,

and they are, at the date of writing, under consideration. There is considerable opposition to the acceptance of the terms proposed, as the legality of the procedure has been called in question. Whether accepted or not, one thing is certain, that the magnificence of the offer has never been equalled in America, except in the case of the Rockefeller Foundation, and scientific medicine in this country will, forever, owe a debt of gratitude to the liberality of Drs. Will and Charles Mayo.

Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., *must be* in our hands by the first of the month previous to publication.

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Original Contributions

ADDRESS ON SURGERY*

BY FRANCIS J. SHEPHERD, M.D., LL.D., F.R.C.S.

It is one of the privileges of age to be reminiscent, and when asked to give this address I thought it would be interesting to look back and see what changes have taken place in the science and art of surgery since I entered as a medical student in the fall of 1869.

It is well for the present generation of surgeons to be aware of the condition of affairs in the pre-antiseptic days and to have some conception of the dangers and difficulties of surgery at that time. What is easy to the present generation was a source of difficulty then, and it is well to know that surgery was not born thoroughly equipped as was Minerva, the Goddess of Wisdom and Wars, Arts and Sciences, when she sprung full grown and completely armed from the brain of Jupiter.

The efficiency of surgery has been arrived at by a slow process of evolution. There had been but little advance in surgery for some time before I entered medicine. Lister was just being heard of in Glasgow as applying Pasteur's germ theory to surgery and trying to find some substance which would destroy the organisms he was convinced were the cause of sepsis and suppuration. But the germ theory was not yet admitted by surgeons in general and especially were the London surgeons opposed to it and even made fun of Lister's antiseptic efforts.

I remember my first experience of surgical responsibility was sitting up at night after an amputation of the thigh so as to be present and apply a tourniquet in case of secondary hemor-

*Read before the Ontario Medical Association, May 27, 1915.

rhage. At that time only one end of the silk ligatures was cut short, the other hanging out of one corner of the flap, chiefly, they said, for drainage. During my student days it was rare to have an amputation of the thigh live until the ligature came away on the 14th day, the patient usually died of shock or pyemia the first week; I do not think I ever saw an amputation of the thigh high up recover.

Surgical operations then consisted chiefly of removal of external tumors, amputations for injury or disease, cutting for stone and opening abscesses. The abdomen was a *mare clausum,* and if by accident the peritoneal cavity was opened the fate of that patient was sealed and the church was his only salvation. Still the surgeons of that day were most skilled operators as they had learned their business in pre-anesthetic times, and it was a common thing to see an amputation of the leg or thigh done in sixty seconds and a complete lateral lithotomy under two minutes. I remember Sir William Ferguson of King's College Hospital, London, operating in a dress suit with much expanse of shirt front and cuffs and being so clean an operator that he prided himself on never getting a drop of blood on his white shirt. Most operators used an old frock coat which was never cleaned and so was soaked in the gore of many victims. Some washed their hands, others did not, the field of operation was rarely cleansed except the wound caused by injury was full of dirt. All compound fractures of the leg were amputated at once so as to avoid certain death from sepsis, the only exception was when the bone had made a punctured wound, the wound would be closed by congealed blood and healed in that way under clot.

In my last year of studentship Professor Wm. Fraser, who had spent the summer in Scotland, introduced Lister's method of opening abscesses under lint soaked in carbolic oil. At this time there was no such thing as trained nursing, any old person was employed who thought they had a gift that way, and did their best; many of them imbibed, for at that time every patient was given an allowance of beer, whiskey, or port wine daily and the night nurses especially were seldom sober. I remember in the seventies paying a visit to a patient in the hospital on whom

I had that morning operated for strangulated hernia. I could not find the nurse at all (she supervised three flats), but my patient I found sitting out on the verandah in his night shirt smoking a pipe and all the obstreperous or delirious patients strapped to their beds. It was a cool evening in the autumn and my patient died of pneumonia some days afterwards.

I do not want to imply that we had no successes, for I have seen very many brilliant successful lithotomies, removal of tumors and amputations, and I have even seen healing by first intention. But it was strange that one of our surgeons, a very skilful operator, but who after operating visited his patients but seldom, had better results than his colleague, a much more conscientious man, who also was fond of pathology and liked to see the post-mortems on his patients and fussed a good deal over his cases. Needless to say the latter's results were not remarkably good.

We knew nothing about germs at that time and thought that putrefaction was caused by the oxygen of the air. When Pasteur demonstrated that putrefaction was caused by microbes Lister by his previous work, from his student days under Sharpey, was prepared to welcome this discovery and he says in his Third Huxley Lecture: "Thus was presented a new problem; not to exclude oxygen from wounds, which was impossible, but to protect them from the living causes of decomposition by means which should disturb the tissues as little as is consistent with the attainment of the essential object." Since then it has been proved that putrefaction is not the only cause of serious mischief in wounds, for there are microbes which are odorless and yet produce profound septic effects.

At this period and for some time after it was a common thing for the operating room orderly to be also orderly in the post-mortem room. Hence the better results of operations performed in the country or private houses than those performed in hospitals. When I visited London in 1873 I found the results of the surgeons fairly good, in fact London and English surgery was always clean and the results excellent for that period, and this is one of the reasons why antiseptic surgery made such slow progress in London. Whilst in Germany

the surgery of that time was very dirty and neither personal cleanliness nor the cleanliness of hospitals a distinguishing feature, the results were accordingly bad, hence Listerism was adopted with avidity and the change to antiseptic surgery revolutionized the German methods with such amazing improvement in the death rate that soon they out-Listered Lister.

When I was in Vienna in 1874-5 antiseptics had not yet been introduced and surgical mortality was tremendous. I never saw an operation for strangulated hernia recover and sepsis prevailed everywhere, even the great Billroth had often disastrous results; twelve years later when I visited Europe again what a change had taken place ! Hospitals and operaters clean to excess; operations never hitherto attempted performed successfully, a very low surgical mortality, and surgery invading every region of the body and annexing territory which formerly was thought to be the exclusive domain of the physicians.

In 1874 I visited Edinburgh to see Professor Lister's work and a great impression it made upon me. John Cheyne was then his house surgeon and if I remember aright he manipulated the hand spray of carbolic solution which was used during the operation and dressings. What struck me most was the excessive care of Lister in his dressings, the great attention to detail and cleanliness; and in operating, his great deliberation. The spray was used on the supposition that most of the germs which infected wounds came from the atmospheric dust; when Lister found that the atmosphere was comparatively harmless and that the organisms were on the skin of the patients and the hands and implements of the operator he abandoned the spray. As many of you may remember, the hand spray was replaced by a steam spray. In Germany this was furnished by a large boiler placed in an adjoining room which poured forth carbolic acid spray into the operating room and covered everybody with a thick Scotch mist; in fact one could scarcely see across the room and to protect oneself waterproof clothing had to be worn. This of course was German excess. Later von Bruns led a crusade against the spray and "fort mit dem spray" was the cry and soon the spray was replaced in Germany by irrigation. Niagaras of water were

poured over the patient and the field of operation, so much so that the floors were flooded and the onlookers had to get on chairs whilst the operator and his assistants waded through the flood in long rubber boots.

Soon irrigation became out of fashion and aseptic and dry dressings were adopted which in ordinary surgery are used to the present day. In military surgery asepticism is impossible and resort is once more being had to antiseptics with the best results.

The scope of surgery in comparison to what it was forty years ago is enormous—no cavity of the body is now shunned by the surgeon; had such advances been prophesied in the middle of last century the lunatic asylum would have been thought a fit place for the prophet.

As I have said before one of the great troubles after amputation was secondary hemorrhage—one saw hanging out of one corner of the stump a number of waxed linen or silk threads; some were on small vessels, others on large, and the surgeon making his rounds looked at the stump and pulled at one or other of these threads to see if they had ulcerated sufficiently to come away ! Very often with the ligature came a gush of blood. This secondary hemorrhage required the reopening of the stump and the vessel secured, no easy matter with the instruments then in use and in a suppurating granulation surface. Sir James Y. Simpson, to do away with ligatures and their dangers, introduced what he called acupressure, a method to compress arteries by means of metallic needles introduced in various ways. At the same time Lister began to cut both ends of his ligatures short and leave them to their fate buried in the tissues; this was before he introduced absorbable ligatures of catgut. Although good results were obtained from acupressure, and many cases of healing by first intention were reported, yet Lister's ligatures won the day and soon Simpson's method passed away and is now quite forgotten.

Abdominal operations are now as safe as any other major cases and our knowledge of germs, how to control their evil effects and to prevent their invasion, makes most operations in surgery comparatively without much risk. Appendicitis, or

inflammation of the bowels as it was called, was thought to be a rare disease and was not considered at all surgical. The common medical term was typhlitis, with peri—or para—as additions. It was thought to commence in the cellular tissue around the cecum or typhlus, or cecus. In a short time our greater knowledge of pathology properly placed the blame on the appendix. Operations were then rarely performed, except for peri-typhlitic abscess. At first operations were never undertaken unless pus was found by the exploring needle, and the search for the appendix was always a matter of difficulty. The first twelve cases I operated on all died, because I was only called in to operate when the physician thought he could do no more; then the surgeon was the *dernier ressort.* At this time diagnosis was not easy and appendicitis was often mistaken for typhoid. It seems absurd now to know with what difficulty physicians and surgeons diagnosed this disease and then only after many anxious and serious consultations, whilst now every man and child in the street could make a diagnosis from a verbal description of the case. But so it is, and what is difficult and obscure in one generation often becomes simple and clear in the next.

It is strange to look back and see the gradual growth of abdominal surgery; at first the only operation on the abdomen was an obligatory one, viz. for strangulated hernia and this was done with serious forebodings. Soon operations were performed for ovarian tumors and ovaries without tumors, and successfully carried out by Lawson Tait, Spencer Wells, Keith and others. In fact we are indebted largely to Lawson Tait for his pioneer work in abdominal and especially pelvic surgery. Ovariotomies, since MacDowell's famous case, were performed from time to time with occasional success, but when I studied in London every case I saw operated on proved fatal. With our knowledge of the germ theory and with the introduction of Listerism the obstacles to recovery were removed and ovariotomy became a common and safe operation. Surgeons rapidly adopted Listerism and "boomed" it and in a short time were doing all the operations hitherto only suggested, such as excision of the stomach, intestines, kidney, spleen, et cetera.

From pest houses German hospitals became sanitariums and as the *Lancet* of August 13th, 1881, observed at the time "our admiration for the change effected is only equalled by our horror of previous conditions." Many German surgeons advocated the compulsory use of antiseptics and Professor Naussbaum, in 1881, suggested the following law: "Any person summoned to heal an accidental case or wound, must no longer close it up with an adhesive plaster, nor examine or disturb it with a finger which has not been disinfected; but after the surgeon has washed his hands and the wound with some disinfectant (for which purpose a five per cent. solution of carbolic acid seems to be the most convenient), the wound must be thoroughly protected with an antiseptic dressing. Such dressing may consist of carbolized jute or wadding, chloride of zinc wadding, or some other well known antiseptic material."

Simon first removed the kidney designedly in 1869. In 1881 an occasional excision of the kidney is reported and papers were read on the subject at the International Medical Congress in London in 1881. I think it was Mr. Henry Morris who first successfully removed a stone from the kidney where there was no suppuration (in 1880). I first excised a kidney successfully in 1884 and a stone in 1886. My first gall stone operation was in 1890.

It is interesting to look back on the past literature and to study the conditions of surgery at that time. In 1888 I gave the surgical address before the Canadian Medical Association in Ottawa and spoke among other things of the surgery of the abdomen and the information given below is extracted from that address: "It was strongly advised that all cases of intestinal obstruction be handed over to the surgeon and not kept on medical treatment by the physician until it was too late to operate." Surgical treatment was recommended in all cases of suppurative appendicitis and a few advanced surgeons advocated early operations. Typhoid perforations were being occasionally operated upon, always with fatal results. It was found out accidentally when operating for tumor in a mistaken diagnosis that tubercular peritonitis could be cured by opening the peritoneal cavity. Perforating gunshot wounds of the

abdomen were being immediately operated upon. Radical cure of hernia was becoming a safe and fashionable operation. The surgery of the gall bladder was looming up as an accepted and successful fact. Lawson Tait reported thirty cases of cholecystostomy with one death. Crede of Dresden had had only five cases with one death, and Langenbuch of Berlin had collected 75 cases of cholecystotomy with 2 relapses, 11 deaths, and 16 cases with fistula resulting. He advised against operation when the stones were in the common duct.

Occasionally cases of operations on the stomach, intestines, spleen and pancreas were reported but with few successes. The operations of nephrectomy and nephro-lithotomy had become well established. In 1888 prostatic surgery was yet in its fatal infancy, though tumors of the bladder were being operated on. In other departments of surgery, the brain and spinal cord were fields of operation just becoming known through the work of Victor Horsley, Keen, Macewen, Weir and others.

Surgery is still advancing and is enlisting more votaries than ever, nearly every new graduate wishes to become a surgeon. Every small place has now a well-equipped hospital with excellent facilities and every opportunity is offered for the prosecution of the art of surgery. I am afraid there is often more art than science and much unnecessary operating because now most operations are comparatively safe. There is something more than mere mechanical skill needed by surgeons. The most important attributes of a surgeon are judgment and knowledge when to operate and when not to operate and when to stop—mechanical knowledge of surgery can never teach this. I remember some years ago visiting a small town west of Montreal and operating in a well-appointed little hospital and afterwards was shown no less than four cases of extirpation of the uterus operated on by four different surgeons, all I am happy to say convalescing (the patients, not the surgeons). What amazed me was that there should be such a necessity for so many such operations in so small a place. In our own large hospitals in Montreal I had never seen so many cases together in the gynecological wards. I remember hearing of another case where a good surgeon in a large city of the United States

operated for appendicitis on the only child of very prominent people. After removing the appendix, as the cecum, or what they thought was the cecum, was full of feces, it was opened and the feces evacuated and then the wound was closed. A few days later a fecal fistula appeared which would not close. The boy's condition from the continuous drain and irritation became bad and an anastomosis operation was advised and done. Still the fistula continued and he grew rapidly worse. He was brought to Philadelphia and a prominent surgeon was consulted, who told me the tale. An exploratory incision was made but nothing could be done as there was so much agglutination of the intestines and the boy's condition so serious. At post-mortem it was found that the appendix was still in situ and had never been removed. It was the upper part of the ileum and not the cecum from which the feces had been evacuated and which was fistulous, but the anastomosis of the ileum with the colon had been a perfect success. Hence you see here a well marked case of technical skill without knowledge. I could relate many analogous cases, but refrain.

As long ago as 1887 Professor Bergmann, at the German Scientific Medical Association, spoke the following impressive pregnant words which are applicable even to-day. He said: "There is more or less rivalry between medicine and surgery in the case of disease but further progress in surgery can only take place through an increased knowledge of internal medicine. Surgeons must now avail themselves more of the accurate means of investigation which one owes to physicians, auscultation and percussion, thermometry, chemical, microscopical and electrical investigations. As long as internal medicine remains guardian of scientific medicine and scientific principles, so long will it remain the parent tree of which surgery is only the branch. It follows from what has been said that surgery owes all its recent development to clinical medicine and just as antiseptic treatment is the product of careful observation in etiology so the energetic procedures of internal surgery will have successful results only when firmly established by the methods of clinical medicine; otherwise surgery will sink in the hands of expert specialists to a mere display of manual dexterity."

Surgeons soon felt that they could not be good internists and have a competent knowledge of all branches of surgery, so this has led to team work in private and public hospitals which makes for such efficiency and enables the surgeons to do an enormous amount of work. This method, however, is apt to make the surgeon a mere operating machine and may not work out for the entire good of the profession. It is better for a surgical department to have a head who has gone through all the stages of medicine including a sound course in pathology and pathological chemistry and who has a good training in clinical medicine. Of course his department is equipped with a staff of specialists in pathology and chemistry but he himself should be the guiding hand and suggest and direct the work to be done. It goes without saying that every one who practises in the country must do some surgery, but he should not attempt it without having had some hospital training as a surgical interne after graduation. The tendency of the younger surgeons is to look upon the older men as having had no proper training; they call us pre-scientific and seem to think that laboratory methods are everything. I remember a pathologist giving a lecture to the incoming students in a medical school and he told them that laboratory methods had supplanted all others, including experience, which the older men prided themselves upon. I had happened to have had some ten days before a serious gunshot wound of the arm in a boy where the brachial artery and biceps muscle and some of the nerves had been shot away, where, in fact, the whole arm was shattered He had pulled the gun to him by the barrel when it went off. The whole forearm was waxlike, bloodless, cold and absolutely no circulation existed. I was advised to amputate immediately, by a colleague, but refrained, and after treating and dressing the wounded arm, wrapped the extremity in layers of cotton wool. In 24 hours there was a slight flush in the fingers and in three days the limb was warm and afterwards the case went on well. Now I asked my friend, the lecturer, how he could tell by any laboratory method, whether to amputate or wait. Of course he could give no answer, and no doubt he thought he was quite right, but he had never practised surgery and had never been

up against a case which required judgment and experience, and yet he was quite willing to speak *ex cathedra* to men who were going to practise medicine and surgery. I may say the boy alluded to has a most useful right arm, with which he can play a good game of tennis. As the Psalmist says, "I am wiser than the aged," so say the younger men of every generation, but remember what Huxley says: "We are none of us infallible, not even the youngest." I admit as we get older we become more conservative, and perhaps procrastinate, but this is the infallible result of long experience.

How many methods have we older men seen come and go, lauded to the skies by eloquent advocates both in societies and journals; we often hear of remedies and methods by which every case is cured and dozens who have made use of them print undigested articles confirming the originator's views and improving on them; some would find them only suitable on selected cases, and finally this remedy or method is forgotten because it is of no value and could not stand the test of experience. As Byron said in his poem, "English Bards and Scotch Reviewers,"

"Thus saith the Preacher: 'Naught beneath the sun is new.
What varied wonders tempt us as they pass?
The cow-pox, tractors, galvanism, gas,
In turns appear to make the vulgar stare
Till the swoll'n bubble bursts and all is air?"

Although I am as much an advocate of laboratory methods as the most scientific younger surgeon, yet they should not replace those powers of observation which are the great asset of the medical man. I fear it is tending to do so, for the recent graduate dares not diagnose a fracture without X-rays, a typhoid fever without a Widal, syphilis without a Wassermann, and so on. We cannot always carry a laboratory or hospital appliances about with us, so we should not depend too much on the use of mechanical means in diagnosing disease, and should not let our powers of observation atrophy. Time, no doubt, will remedy this state of affairs and things will bear their proper proportion to one another. Some are very sceptical

that this will occur and think there is nothing true or sure but mutability. As Moore says,

> " This world is all a fleeting show,
> For man's illusion given;
> The smiles of joy, the tears of woe,
> Deceitful shine, deceitful flow,
> There's nothing sure but Heaven."

For the sake of the wounded in the present awful war, it is fortunate that surgery has attained such a high pitch of efficiency and that hospitals are now so well arranged and managed. What a contrast to that which existed in the Crimean War, when Florence Nightingale did so much to clean out the Augean Stables whose doors were closed with red tape. Now from the field to the base hospital everything is done for the wounded in the quickest possible time, and in the most skilful manner, and the proportion of recoveries is proportionately large. I am glad that Canada is doing so well and is so eager to establish hospitals. The Universities deserve great commendation for the way they have come forward to man the various hospitals with their best teachers, best surgeons and physicians and specialists. All honor to them and to the Canadian nurses and students who go with them. We are all sure the work will be well and scientifically done, and reflect credit not only on the British Empire, but on the whole of Canada and its professional men and women. May God go with them and prosper them!

Society Proceedings

THE ONTARIO MEDICAL ASSOCIATION

The thirty-fifth Annual Meeting of the Ontario Medical Association, and to which, owing to our date of publication, we could refer but shortly in our last issue, was a gratifying success. The meeting convened at Peterborough, Ontario, on May 25th under the presidency of Dr. D. J. Gibb Wishart, Toronto, and whom we take this opportunity of congratulating. Dr. Wishart made a capital presiding officer and a most efficient chairman. He was dignified and conducted the proceedings promptly and well. The Presidential Address was one of the best delivered in years and worthy of careful reading. The profession in Peterborough were most untiring in their efforts to entertain their guests, and we thank Dr. G. S. Cameron and his associates for many kindnesses during the meeting. The attendance this year was splendid and numbered almost 400, accounted for at least in part, by the fact that the Medical Officers of Health for Ontario met at the same time. The weather, subsequent to noon on Wednesday, was beautiful and bright, though somewhat chilly. The Entertainment Committee performed their duties well, giving the visitors many a pleasant hour. On Wednesday a trip by special steamers was given to the Lift Lock and down the Otonabee River, with a musicale and afternoon tea immediately after arriving back again at the Armories. A smoker was arranged for the same evening at the Peterborough Club, which was enjoyed by all, and a motor drive around the city the day following, tendered by members of the local profession.

It was a matter of disappointment that Dr. E. C. Rosenow, of Chicago, was unable to be present and deliver the address in medicine, but his place was admirably filled by Dr. J. G. Phillips, a Canadian by birth, and now of Cleveland, Ohio, who

read a splendid paper on "Clinical Manifestations of Cerebro-Spinal Syphilis." Prof. F. J. Shepherd, of Montreal, gave the address in surgery, affording both pleasure and instruction to a hall filled to capacity with members. This address will be found in this issue of THE JOURNAL.

Some of the other excellent papers read included the following:—

1. "The Relation of School Children to the Tuberculosis Campaign," J. H. Holbrook, Hamilton.
2. "The Relation of the Mental Hospital to the General Practitioner's Work," Harvey Clare, Toronto.
3. "The Use of Radium and Trichloracetic Acid in Dermatology," W. H. B. Aikins, Toronto.
5. "Exophthalmic Goitre," D. Smith, Stratford.

SURGICAL SECTION.

1. "Abdominal Pain," B. Z. Milner, Toronto.
2. "Local and Spinal Anesthesia," J. R. Parry, Hamilton.
3. "Simple Goitre and its Treatment," F. N. G. Starr, Toronto.
4. "Tendon Fixation in Infantile Paralysis," W. E. Gallie, Toronto.
5. "The Principle of the Surgical Treatment of Exophthalmic Goitre," W. J. McDonald, St. Catharines.

1. "Scopolamine-Morphine Narcosis in Childbirth," J. G. Gallie, and W. A. Scott, Toronto (Read by the latter).
2. "Serious Vomiting in Early Pregnancy," K. C. McIlwraith, Toronto.
4. "Cancer of the Uterus, with Reference to its Early Diagnosis," G. S. Cameron, Peterborough.

2. "The Use of the Electro-Magnet in Ophthalmic Practice," R. A. Reeve, Toronto.

2. "Medical Education, Specialties and Fee-Splitting," Adam H. Wright, Toronto.
3. "The Local Medical Society," A. F. McKenzie, Monkton.

1. "Clinical Electrocardiography, with lantern slides," Julian Loudon, Toronto.

2. "Syphilis of the Heart and Aorta," A. McPhedran, Toronto.

3. "Treatment of the Heart in Fever," H. B. Anderson, Toronto.

1. "Observations on Blood Pressure," A. T. Emmerson, Goderich.

2. "Serum Therapy," W. Goldie, Toronto.

3. "Bowel Conditions in Epilepsy," Goldwin Howland, Toronto.

4. "Vagotony and Duodenal Ulcer," F. W. Rolph, Toronto.

5. "The Etiology of Tetany, Clinical and Metabolic Studies," Alan Brown, Toronto.

1. "Treatment of Arthritis," E. Seaborn, London.

2. "Empyema," W. A. Brown, Chesterville.

3. "Renal Function in Surgical Disease of the Kidney," W. W. Jones, Toronto.

4. "Cancer of the Stomach," H. A. Bruce, Toronto.

5. "Surgical Aspects of Neurasthenia," E. V. Frederick, Peterborough.

The election of officers resulted as follows: President, Dr. H. B. Anderson, Toronto; Vice-Presidents, Dr. G. S. Cameron, Peterborough; Dr. A. T. Emmerson, Goderich; Dr. C. B. Oliver, Fort William, and Dr. W. K. Colbeck, Welland; Secretary, Dr. F. A. Arnold, Toronto; Assistant Secretary, Dr. F. C. Harrison, Toronto; Treasurer, Dr. J. B. Elliott, Toronto; Delegates to Canadian Medical Association, Drs. D. J. Gibb Wishart, Toronto; F. C. Neal, Peterborough; H. J. Hamilton, Toronto.

Among the resolutions adopted was one urging a measure to secure affiliation of medical societies in counties.

A resolution, moved by Drs. J. H. Elliott and F. N. G. Starr, Toronto, was enthusiastically adopted, expressing deep appreciation by the Ontario Medical Association of the fact that numbers of its members had responded to the call of the

Empire or had entered upon active service, and expressing the intention of the association to look after the work of these doctors in their absence.

A resolution by the Section of Obstetrics and Gynecology urged the adoption of popular education in regard to the nature of cancer, to help it to receive earlier diagnosis and therefore more hopeful treatment. The President and Vice-President were appointed a committee to promote legislation to protect the interests of the medical profession in the application of the Workmen's Compensation Act.

The Medical Officers of Health elected the following officers for the ensuing year:—President, Dr. A. W. McPherson, Peterborough, former M.O.H., but now on active service overseas; Vice-President, Dr. A. J. Macauley, Brockville; Secretary-Treasurer, Dr. J. W. S. McCullough, Toronto, Provincial Officer of Health; Committee on Papers: Dr. Roberts, Guelph; Dr. F. A. Dales, Stouffville, and Dr. J. W. S. McCullough, Toronto.

At the afternoon and closing session of the Medical Health Officers' Association the report of the committee composed of Drs. W. E. Crain, Chrysler; F. W. Varden, Galt; C. N. Laurie, Port Arthur, and E. Bull, Lambton, suggested a schedule of salaries for Medical Officers of Health: Townships, $300 per annum; incorporated villages, up to 1,000 population, $150 per annum, with addition of $50 for each 1,000 or majority thereof; towns, $100 for first 1,000 population, $50 additional for each subsequent 1,000; cities under 20,000, $1,000 per year, over this number, $1,200. In the discussion leading to the adoption of the report it was pointed out as desirable as to towns and cities that the salary should, to insure best results, be large enough to enable the Health Officer to give his whole time to the work.

The Local Committee arranged a most attractive exhibit of pharmaceuticals, surgical instruments, etc., etc. The exhibitors were given space in the Armories, and the firms included the Denver Chemical Mfg. Co., New York and Montreal; Kress & Owen Co., New York and Montreal; Glaxo, Limited, Toronto; DeVilbiss Mfg. Co., Windsor; DeLaval Dairy Supply Co., Peterborough; Ingram & Bell, Limited, Toronto; J. F.

Hartz Co., Toronto; Dominion Register Co., Toronto; Archibald Young & Son, Edinburgh; Waterbury Chemical Co., Toronto; Gilmour Bros. & Co., Montreal, and others.

The retiring President of the Association, with the Executive and different Committees, are deserving of congratulation on the work done during the year just closed.

During the year, the chief work done in addition to the preparation for the Annual Meeting, consisted in appearing before the Private Bills Committee of the Local House, in opposition to the Bill of the Chiropractors. Fortunately, the representatives of the body did not require to formulate their objections to the Bill, because the position taken by the Chairman of the Committee, the Hon. I. B. Lucas, was, that in view of the early fulfilment by the Government of the Royal Commission upon all things medical, promised by the late Sir James Whitney, at the public opening of the new Toronto General Hospital, it was unwise to allow this or any similar Bill to pass, or even to be considered.

A second matter of great importance to the profession in Ontario, was gone into very fully by the Committee *re* Affiliation of the County and Town Medical Societies, under the chairmanship of Dr. R. R. Wallace, of Hamilton. This committee got into touch with a large majority of the various County and Town Medical Societies of the Province, and a great deal of interest was evinced. The wisdom of linking up these societies with the Provincial Association, and making them the portal of entry to that association, was considered evident in that the admission to any member could be decided upon by those who know him best. The necessity of unifying the provincial profession in such a way that the Provincial Association could satisfactorily represent the medical voice of the province, and thus become possessed of the right to express their official opinion before the Government or the public, upon any important question concerning things medical, would be a logical outcome of the above arrangement. When the association met in Peterborough, there were representatives present from a number of the local societies, and the committee was able to bring in some important recommendations to the asso-

ciation, and secure leave to proceed with the further elucidation of the whole scheme. It was recognized at once that a number of local societies would require to be organized in the at present unorganized districts, and that this would mean the appointment of a permanent secretary and organizer. Several members volunteered to take the matter up in their own districts, and Dr. H. A. Bruce, of Toronto, was made convenor of a committee to secure funds to begin the preliminary work of organization.

President Wishart, in his address, discussed the following matters in order:

First, the relation of the profession in the Province to the war;

Second, the passage of the Ontario Medical Amendment Act;

Third, the work done by the Committee on Relief of the Belgian Physicians and Pharmacists, with an account of the moneys subscribed by the Province of Ontario;

Fourth, the affiliation of the County and Town Medical Societies;

Fifth, the passage of the Act for the curtailment of the sale of habit-forming drugs in the United States; and, finally, the Evolution of the Specialist in Oto-Laryngology.

The President and Mrs. Wishart gave a most enjoyable reception on Friday evening, at which there was a large attendance. Every visiting member left Peterborough after a most enjoyable visit.

Militia and Naval Medical Services and Ambulance

No. 1 GENERAL HOSPITAL OF THE FIRST CANADIAN CONTINGENT

The following comprise the staff of officers of No. 1 General Hospital of the First Canadian Contingent, now on active service in Northern France:—

Col. Murray MacLaren, Commanding Officer, Surgeon to the General Public Hospital, St. John, N.B., at present President of the Canadian Medical Association.

Lieut.-Col. Kenneth Cameron, Lecturer on Surgery, McGill University.

Lieut.-Col. F G. Finley, Professor of Medicine, McGill University.

Lieut.-Col. C. F. Wylde, Demonstrator in Clinical Medicine, McGill University.

Major E. A. Le Bel, Quebec.

Major C. E. Doherty, Medical Superintendent, Hospital for the Insane, British Columbia.

Major A. C. Rankin, Professor of Bacteriology, University of Alberta.

Major A. Mackenzie Forbes, Lecturer on Orthopedic Surgery, McGill University.

Capt. J. T. Hill, Saskatchewan.

Capt. G. Shanks, Physician to Royal Victoria Hospital, Montreal.

Capt. G. G. Corbet, Radiographer, St. John, N.B.

Capt. J. G. Hunt, Laryngologist and Oculist, Fort William, Ontario.

Capt. G. S. Ramsay, Quebec, Que.

Capt. Robt. Wilson, Radiographer, Western Hospital, Montreal, Que.

Capt. C. H. Robson, New Westminster, B.C.

Capt. T. A. Lomer, Medical Officer of Health for the City of Ottawa, Ont.

Capt. A. W. M. Ellis, Toronto, Ont., Research Scholar from the Rockefeller Institute, New York.

Capt. A. L. Johnson, Vancouver, B.C.

Capt. A. E. H. Bennett, Kamloops, B.C., Adjutant.

Capt. L. W. MacNutt, Alberta.

Capt. A. H. Cameron-Smith, Manitoba.

Capt. G. H. Jardine, Prince Edward Island.

Capt. A. Z. Lozier, New Brunswick.

Capt. R. M. Luton, Nova Scotia.

Capt. O. G. Hassard, Dental Surgeon, Ontario.

Capt. Robt. Kirkpatrick, Quartermaster, Demonstrator in Chemistry, McGill University.

Lieut. M. S. Gooderham, Paymaster, Toronto, Ont.

The following Chaplains are attached to the Hospital:—

Major P. M. O'Leary, Quebec, Que.

Major W. H. Emsley, Pembroke, Ont.

Capt. A. D. Cornett, Quebec, Que.

In addition to these officers, eight other medical officers are joining the unit.

No. 4 GENERAL HOSPITAL

The profession were relieved to learn on May 27th, that the University Base Hospital had arrived safely in England, per S.S. *Corinthian.* We look forward to receiving full information regarding this unit and where it is located in time for our next issue.

About forty officers of the Canadian Army Medical Corps, who reached England the last week of May, proceeded to Eastbourne for a special course of instruction before being sent to the different Base Hospitals to take service in the Royal Army Medical Corps. One hundred more qualified Canadian

medical practitioners now serving with the Canadian Contingent as N.C.O.'s and men have already been transferred to the Royal Army Medical Corps. A matron, with thirty-two nursing sisters of No. 4 Stationary Hospital (French Canadian) left for France on May 27th. Thirty-five nursing sisters under Matron Douglas, belonging to No. 5 Stationary Hospital, Queen's, also left for France on May 26th.

Col. G. S. Ryerson, of Toronto, recently made a ten days' tour of the Canadian front, and spent a good deal of time with the Canadian wounded.

It was with the deepest regret that the many friends of Dr. Eddie Robertson, of 143 College Street, Toronto, heard a few weeks ago of his having been wounded by shrapnel when in the trenches binding the wounds of two of his platoon. A high explosive shell landed right in the trench, instantly killing the two men being dressed and wounding Dr. Robertson. Thus far, we are delighted to learn, that the wound is not serious.

DOCTORS ARRIVE SAFELY

Twenty-three doctors from Toronto and Ontario towns, who left Toronto on May 9th, arrived safely in the Old Country. This information reached Toronto in a cable to Dr. W. J. Wilson, of 380 Bloor Street West, from his son, Dr. N. King Wilson, announcing his safe arrival in England with the party. Major Wilson, being the senior officer in the party, was placed in charge for the trip over by Lieut.-Col. Frederick W. Marlow, Assistant Medical Director of the Division.

The doctors are among the one hundred doctors who will join the Royal (British) Army Medical Corps, with the rank of Lieutenant, as announced in The Journal. The British War Office some time ago asked the Canadian Government to supply one hundred officers, and Lieut.-Col. Edmund E. King was authorized by the Militia Department to select Ontario's share, which was placed at thirty. These officers are now under the control of the British Government, and will be placed on such duty and at such places as the Royal Army Medical Corps desires.

ONTARIO BASE HOSPITAL

Partially as the result of the advice given by Sir Adam and Lady Beck, the Ontario Government decided last month to establish and maintain a hospital for a thousand beds for the care of wounded Canadian soldiers. The hospital will be located at some point in the south of England, but so far the place has not been selected. In addition the Government will provide six motor ambulances for use on the battlefield. The intention of the Government was announced in a statement issued recently by the Hon. Dr. Pyne, acting Premier.

Mr. Richard Reid, Agent-General for Ontario in England, has been instructed by the Government to proceed with the hospital arrangements. What the expenditure will be is not known, but the information supplied the Government is to the effect that the cottage units of the hospital could be erected for from $7,500 to $10,000 each, so that the total outlay will probably exceed $100,000.

TORONTO MEDICAL GRADUATES GET A.M.C. COMMISSIONS

According to a cable received from Dr. L. E. Wilson, formerly of the Queen Street hospital staff, twenty young Toronto University medical graduates of the class of 1915, who went as privates with the Casualty Clearing Hospital No. 2, to England, have been granted commissions in the Royal Army Medical Corps.

Dean C. K. Clarke, of the Medical Faculty of the University of Toronto stated that the Casualty Clearing Hospital had been broken up on or shortly after its arrival in England, and that he understood the doctors with the hospital were to be given commissions in the R. A. M. C.

The graduates were so keen to go to the front that they enlisted as privates. Their work will be immediately behind the trenches, so that it will not be without excitement. They are as follows: G. Allison, Picton; S. S. Ball, Flesherton; A. M. Bell, Leeming Carr, Hamilton; H. A. Cates, J. Chassels,

F. W. Clement, Deseronto; R. C. Coatsworth, Toronto; T. H. Cruise, Berlin; D. T. Fraser, York Mills; H. B. Hamilton, Maurice R. Helliwell, Toronto; W. R. Hodge, St. Thomas; H. C. Martin, Hamilton; A. A. Moon, Albuna; P. M. O'Sullivan, Toronto; H. R. Smith, Toronto; T. D. H. Storms, Toronto; S. Y. Walsh, Peterboro', and D. E. S. Wishart, Toronto.

RED CROSS HOSPITALS TO HAVE ONE THOUSAND BEDS

Owing to the generous contribution of $60,000.00 of Mrs. Fulford and Mrs. A. S. Hardy, of Brockville, Ont., toward the funds of the Canadian Red Cross Society, that organization has been enabled to accede to the request of the British War Office to make the Duchess of Connaught Canadian Red Cross Hospital at Cliveden, one of one thousand beds, together with an Isolation Hospital and Recreation Room. The equipment of the recreation room, costing $2,500.00, is being paid for by Colonel and Mrs. A. E. Gooderham, and the equipment of the operating room, costing $2,100.00, is being contributed by the Misses Janes, of Toronto.

SYMPATHY WITH COLONEL G. S. RYERSON

Princess Christian recently asked the Committee of the Red Cross Society in London to join her in expressing to our esteemed confrere, Dr. Geo. Sterling Ryerson, the heartfelt sorrow in his recent double bereavement. Her Royal Highness moved, seconded by the Marchioness of Lansdowne, that a vote of condolence be sent to Dr. Ryerson. The motion was carried in silence.

CANADIAN NURSES IN FRANCE

Canadians now nursing wounded at the hospitals in Paris are: Misses Mackenzie, Collyer Taylor, Mary Robertson, Mrs. Vaughan, Mrs. Sturgis.

PERSONALS

Dr. E. K. Richardson, 705 Spadina Avenue, will probably command the 30th Battery of Toronto, the new artillery unit being raised.

Congratulations are in order to Dr. and Mrs. F. A. Cleland, of Bloor Street East, on a birth of a babe on June 4th.

The Commission of Honorary Lieutenant-Colonel has been conferred upon Drs. H. B. Anderson, H. A. Bruce, J. O. Orr, and H. J. Hamilton, of Toronto.

Dr. H. A. Bruce left Toronto on June 6th, and spent the week at the American College of Surgeons Convention at Rochester, Minn., stopping off at Cleveland, on the way over, and returning via Chicago.

Dr. W. H. B. Aikins gave an enjoyable "smoker" to a number of Fellows of the Academy of Medicine at his residence on June 4th.

Captain Dr. George Strathy, who left Toronto with No. 2 Clearing Hospital is at present in charge of the Infectious Cases at Moore Barracks, Shorncliffe Hospital, England.

Dr. W. H. B. Aikins, President of the Academy of Medicine, and Mrs. Aikins entertained the Fellows of the Academy and their wives at a most enjoyable garden party on the Academy lawns on June 23rd.

THE TRINITY COLLEGE SCHOOL OLD BOYS' DINNER

This dinner, which took place at the school at Port Hope, on Victoria Day, brought a large number of old boys together. It was the fiftieth anniversary of the opening of the school, and Dr. Arthur Jukes Johnson, of Toronto, and the Reverend Dr. C. J. Bethune, of Guelph, were the guests of honor, Dr. Johnson's name being the first on the school register, and Dr. Bethune having had charge of the school thirty out of the fifty years of its existence. Amongst the "old boys" were noticed J. W. Worrell, K.C., LL.D., Chancellor of Trinity University; Frank Darling, architect; E. Douglas Armour, K.C., D'Arcy Martin, K.C., of Hamilton; the Hon. T. L. Raymond, Major H. C. Osborne, Rev. Dr. Cayley, the Ven. Archdeacon Inglis-Gordon Osler.

The dinner was of a most enjoyable character, bringing together men who, in many instances, had not seen each other since their schooldays. The reminiscences were many and varied, and great satisfaction was everywhere expressed as to the good work that the school always has done, and is doing. As Dr. Johnson said, in closing his speech, "Like an advertisement seen on the backs of many English magazines, 'Fifty years of age, and still going strong.'"

DR. JAMES MACARTHUR, OF LONDON

Dr. James MacArthur, President of the Ontario Medical Council, died unexpectedly at his home in London, on May 23rd.

Dr. MacArthur was born at Ailsa Craig, sixty years ago, and had practised in London for thirty-five years. He was a graduate of Queen's University, Kingston, Ont., in both arts and medicine. He was one of the founders of the London Medical Association.

Duncan MacArthur, ex-member of Parliament, of Ailsa Craig, is a brother. Mrs. Roy Coghill, of Montreal, is a daughter, and Frank E. MacArthur, of Edmonton, a son.

The funeral was held on Tuesday, May 25th.

SIR WILLIAM GOWERS, M.D., F.R.C.P., F.R.S.

Sir William Gowers, Consulting Physician to University College Hospital, and to the National Hospital for the Paralyzed and Epileptic, London, England, died on May 4th, after a long illness. Sir William was born in London, on March 20th, 1845, was educated at Christ Church College School, Oxford, and entered the medical profession by being apprenticed to a country surgeon at Coggeshall, Essex, when in his 17th year. He received his medical education at University College and its hospital, and qualified in 1867, by taking the diploma of M.R.C.S., and two years later graduated M.B. in the University of London.

The Physician's Library

Text-Book of Histology. Bailey. Fourth edition. Publishers, William Wood and Company, New York. Price, $3.50.

The primary aim of the writer of this work has been to give the student of medicine a text-book of histology for use in practical laboratory instruction. His object has been most successfully achieved.

In the present edition his original plan has not been altered, only such changes having been made which were necessary with the advance in technique. The book is beautifully illustrated. The chapters on the histology of the nervous system are especially worthy of mention. This work can be highly recommended to all students. D. K. S.

Urinary Analysis and Diagnosis. Louis Heitzman, M. D. Third edition. William Wood & Co.

Part I very satisfactorily covers the chemical examination of urine and only those tests which can be readily used by the practitioner are included.

Part II is devoted to a complete study of the miscroscopical findings of urinary sediments. The interpretation of these findings is dealt with in Part III, and the numerous full page sketches greatly assist in elucidating the text.

One is rather surprised at the brevity of the chapter on the "Determination of the Functional Efficiency of the Kidneys," only short notes being given on the recent methods.

The book is one of value to the practitioner. R. D. D.

Directions for a Practical Course in Chemical Physiology. W. Cramer. Second edition. Longmans, Green & Co.

This laboratory guide possesses many excellences, it is orderly, concise, and has well selected tests. If one can find any faults they are that completeness of description has occasionally been sacrificed for brevity, and that some of the more recent advances in chemical physiology are omitted. For instance one searches in vain for any reference to hydrogenion concentration in speaking of the reaction of body fluids. The arrangement of the text is good, and on the whole the book may be heartily recommended to students. F. W. R.

The Dispensary Treatment of Pulmonary Tuberculosis. By Hilda Clark, M.B., B.S., Lond., late Hon. Medical Officer, Street Tuberculosis Dispensary, and Tuberculosis Medical Officer to the County Borough of Portsmouth. Royal octava, viii+280. London, Bailliere, Tindall and Cox, 1915. Price 15s. net.

This volume is a record of the study of tuberculin treatment of ambulant cases of tuberculosis, principally pulmonary, and is offered as a contribution to assist those undertaking the treatment of patients at home. The patients were treated in dispensaries at Street, Walton, Glastonbury and Wells (Somerset), June, 1910, to December, 1911, and reported upon as in January, 1914; also patients treated in Portsmouth, June, 1911 to June, 1913, and reported upon as in November, 1913.

The conclusions reached are: 1. Tuberculin can be used with apparent good effect in nearly every case in which the condition, as judged by ordinary clinical methods, allows a reasonable possibility of improvement.

2. In a large proportion of cases, where the disease is at an early stage, or limited in extent, one or more courses of tuberculin, without other measures than attention to ordinary hygiene, results in apparent cure.

3. A course of tuberculin is a justifiable and safe prophylactic for those who may not have active tuberculosis, but whose general health and symptoms suggest tuberculosis and who are not improved by attention to hygiene.

It is to be remembered that tuberculin is to be administered only by a skilled hand; though this study would point out the value of tuberculin when properly administered, it must be looked upon as a potent drug which must be given carefully, and does not lend itself to use by the general practitioner unless he be prepared to make frequent fresh dilutions, see his patient regularly, and continue treatment over a long period of time.

J. H. E

The Treatment, Prevention and Cure of Tuberculosis and Lupus with Oleum Alii. By William C. Miachin, M.D. (Dublin). Second edition, 1915. London: Bailliere, Tindall & Cox. $1.50.

In the preface of the first edition Miachin relates how his attention was first drawn to the use of garlic in the treatment of phthisis. In the county of Meath it had been used for generations in scrofulous conditions and had attained considerable local reputation. A prolonged study of its effects in a varied series of cases, while medical officer to a large union hospital has convinced the author that it has a real value. Some thirteen years ago he made his first communication on the subject, and since that time others have recorded the results in a few cases in the columns of the *British Medical Journal,* the *Lancet* and elsewhere.

The book does not convince one that a true remedy has been found for tuberculosis, and the author's theorizing weakens one's faith in his results. Yet one cannot but feel that he is himself impressed with the value of the drug as he applies it. We know that many cases of advanced tuberculosis take a sudden change for the better no matter what treatment may be instituted. Whether simply *post hoc* and no *propter hoc* he records

many cases, and some are known to your reviewer which would seem to have made remarkable improvement.

Many cases have shown no change. It may be explained by the author's theory "Shut away fluid!"

J. H. E

Practical Sanitary Science. By David Somerville, B.A., M.Sc., M.D., M.R.C.P. (Lond.), D.P.H. (Camb.) F.C.S. Published by Bailliere, Tindall & Cox, London, Eng.

The second edition of this valuable handbook has been received. The work purports to be a handbook for the Public Health Laboratory, and it fills this function admirably. It is of special advantage in connection with the D.P.H. Course. It is well indexed, covers the field of university instruction very well and might be even used as a primer in that Course. The information in regard to disinfection is somewhat more meagre than is desirable in view of the very important place which chloride of lime and liquid chlorine are taking in connection with water supplies and disinfection of sewage in America. Added material on this subject would be advantageous. The emphasis placed on phenols is typical of the medical practice, although not of so much consequence in public health work. The book is somewhat too large to be conveniently carried, but is worthy of a place on the library shelves of those interested in public health work.

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Editorials

MEDICAL HEROES

It is rather a coincidence that, within a week or so of our expressing editorially a hope that members of the Canadian medical profession would not be overlooked in the next list of Birthday Honors, an announcement be made that several Canadian surgeons now in France have been recommended to His Majesty by Sir John French for distinction, in recognition of Distinguished and Gallant Service in the Field. The announcement gives peculiar pleasure to the profession all over Canada, and we are proud of our confreres and feel that they heartily deserve the honor conferred. The names so far mentioned are Lt.-Col. D. W. McPherson, of Grace Hospital, Toronto, now at the front in charge of No. 2 Field Ambulance; Maj. E. B. Hardy, of Bloor St. and Euclid Ave., Toronto, also with No. 2 Field Ambulance; Capt. Alfred K. Haywood, Medical Officer Toronto Battalion, Assistant Superintendent Toronto General Hospital; and Lt.-Col. Shillington, of Ottawa. We

are equally glad to notice, among the list of officers selected, the name of Lt. Arthur Ryerson, son of our esteemed confrere, Col. G. S. Ryerson, who has been so sorely bereaved. Col. Ryerson has, in recognition of his splendid services to the Red Cross Society of Canada, been promoted to the rank of Honorary Surgeon General.

The officers will undoubtedly become members of the Distinguished Service Order, which was instituted by Queen Victoria in 1886, its purpose being "The recognition of special service of commissioned officers in the army and navy." The Order entitles its members to bear the letters D.S.O. after their names. The Sovereign is at the head of the Order and its numbers are unlimited. Its badge is a gold cross, enamelled white, one side bearing an Heraldic Crown surrounded by a wreath of laurels. It is worn attached to the left breast by a red ribbon edged in blue.

The Royal Red Cross was awarded to thirty-seven women nurses, including Miss E. Campbell Prowess of Canada.

We learned at the same time, and it made our hearts swell with pride, that Capt. Francis A. C. Scrimger (Montreal) of the Army Medical Service had the great honor of being gazetted for the Victoria Cross, in recognition of the greatest heroism displayed by him during the Battle of Ypres. Capt. Scrimger is the second eldest son of the Rev. Dr. Scrimger, Principal of the Montreal Presbyterian College, and is 37 years of age. He was born and

brought up in Montreal, and studied at the High School, afterwards entering the Arts Course at McGill University and graduating with the Degree of B.A. Capt. Scrimger then took up the study of Medicine at McGill, and completing the full medical course, graduated in Medicine in 1905. After graduation he was appointed Interne and Admitting Officer at the Royal Victoria Hospital, which position he held for four years. Then he went to Germany and studied at Dresden, Berlin, also at Vienna and Munich. At Berlin he was one of the assistants to Dr. Bier, Surgeon to the Kaiser. On returning to Montreal he practised Surgery, and on the death of Dr. Church, became Medical Officer of the Second Brigade of Heavy Artillery. He was also on the Staff of the Royal Victoria Hospital as Assistant Surgeon, and on the Staff of McGill Medical Faculty. Capt. Scrimger enlisted with the First Canadian Contingent as Medical Officer of the First Royal Montreal Regiment.

The story of the incident in which he distinguished himself was given in the issue of the *Herald* of May 22nd in the following words by Sir Max Aitken, the official "eye witness":

"And here is a story of a brigade headquarters, that is a house surrounded by a moat over which there was only one road. On Thursday the enemy's artillery found the house, and, later on, as the rush came, their rifle fire found them also. The staff went on with its work until the end of the week, when incendiary shells set the place alight and they were

forced to move. The road being impassable on account of shrapnel, they swam the moat; but one of them was badly wounded, for whom swimming was out of the question. Capt. Scrimger, Medical Officer attached to the Royal Montreal Regiment, protected the wounded man against the shrapnel that was coming through the naked rafters and carried him out of the blazing house into the open."

Such a man is an ornament to the medical profession.

DOCTORS AND THE VICTORIA CROSS

It was with pride that the profession learned a few weeks ago that Capt. (Dr.) Francis A. C. Scrimger, of Montreal, now at the front with the Army Medical Service, had had conferred upon him the most coveted honor in the army, the Victoria Cross. Capt. Scrimger displayed the greatest heroism during the Battle of Ypres, and we feel certain that he more than deserved the decoration received at the hands of His Majesty. We know that our confrere will worthily carry the words "For Valor" on his breast. Such deeds alone redeem in a measure at least the awfulness of this, the darkest hour, but one, in the World's History.

There are four military decorations to be won in the war. The greatest of these is the Victoria Cross, and three Canadians have been awarded that most coveted distinction, though, if newspaper reports are correct, but one has lived to receive it. The Victoria

Cross is a bronze Maltese cross, 1½ inches in diameter; in the centre is the royal cross and below in scroll "For Valor." It was instituted by Queen Victoria during the early part of her reign, and is open to officers and men alike. It is cast from Russian cannon captured at Sebastopol, and its material value is estimated at 9 cents, but those who are given it rank as "the bravest of the brave." Until the present war, but 522 crosses had been given—111 for the Crimea war, 182 for the Indian mutiny, 78 for the Boer war, and the rest among 37 other wars.

Many a hero has gone and will go down "unhonored and unsung." The following newspaper clipping gives some little idea of the heroism shown by our army surgeons:

"Some of the finest examples of heroism were given by the doctors and stretcher-bearers, who constantly expose themselves to a devastating bombardment. It was impossible to show lights—even the flare of an electric pocket lamp. The stretcher-bearers had to crawl laboriously through the darkness, and when they found a man who was still alive it was necessary to make a slow and painful journey across the plain, stepping over bodies and avoiding craters, until they reached the motor ambulances waiting on the nearest road. Army doctors and Harley street specialists, like E. B. Waggett, worked in the cellars of ruined Zonnebeke by candle-light before plank tables and cottage doors laid on empty barrels, performing one operation after another."

It will interest our readers to learn the names of the medical profession on whom the Victoria Cross has, since its inception about sixty years ago, been

conferred. The following list is, as nearly as we can find out, correct:

Mouat, J., C.B., Surgeon, 6th Inniskillen Dragoons. October 25th, 1854, Crimea. Now Surgeon-General Sir J., K.C.B., Hon. Surgeon to the Queen. Retired on half-pay. Award made "For Valor" in connection with the charge of The Light Brigade.

Sylvester, H. T., Assistant-Surgeon, 23rd Foot. September 8th and 18th, 1855. Now retired on half-pay.

Hale, T. E., M.D., Assistant-Surgeon, The Royal Fusiliers. September 8th, 1855, Crimea. Now Surgeon-Major. Retired on half-pay.

Home, A. D., Surgeon, 90th Foot. September 26th, 1857, Indian Mutiny. Now Surgeon-General Sir A. D., K.C.B. Retired.

Jee, J., C.B., Surgeon, 78th Foot. September 25th, 1857, Indian Mutiny. Now Surgeon-Major (Deputy Inspector-General). Retired.

McMaster, V. M., Assistant-Surgeon, 78th Foot. September 25th, 1857. Indian Mutiny. Deceased.

Reade, H. T., Surgeon, 61st Foot. September 14th and 16th, 1857, Indian Mutiny. Now Surgeon-General. Retired.

Bradshaw, W., Assistant-Surgeon, 90th L. I. September 26th, 1857, Indian Mutiny. Deceased.

Temple, W., Assistant-Surgeon, Royal Artillery. November 10th, 1863, New Zealand. Now Brigade-Surgeon.

Raynor, W., Captain, Bengal Veteran Establishment, Delhi Magazine, May 11th, 1857, Indian Mutiny. Deceased.

Douglas, C. M., M.D., Assistant-Surgeon, 24th Foot. May 7th, 1867, Andaman Islands. Now Surgeon-Lieutenant Colonel.

Manley, W. G. N., Assistant Surgeon Royal Artillery, April 29th, 1864, New Zealand. Now Surgeon-General. Retired.

Hartley, E. B., Surgeon-Major, Cape Mounted Rifles, June 5th, 1879, South Africa. Now Surgeon-Lieutenant Colonel.

Reynolds, J. H., Surgeon, Army Medical Department. January 22nd and 23rd, 1879, South Africa. Now Surgeon-Lieutenant-Colonel. Retired.

McCrea, J. F., Surgeon, Cape Mounted Rifles. January 14th, 1881, South Africa. Deceased.

Crimmin, J., Surgeon, Bombay Medical Service. January 1st, 1889, Burmah. Now Surgeon-Major.

Le Quesne, F. S., Surgeon, Army Medical Staff. May 4th, 1889, Upper Burmah. Now Surgeon-Captain.

Lloyd, O. E. P., Surgeon, Medical Staff Corps. January 6th, 1893, Simla. Now Surgeon-Major.

Whitchurch, H. F., Indian Medical Service, March 3rd, 1895, Chitral Fort. Now Surgeon-Captain.

Major William Babtie, C.M.G., Royal Army Medical Corps.

Lieutenant E. T. Inkson, Royal Army Medical Corps.

Lieutenant W. H. S. Nickerson, Royal Army Medical Corps, attached to Mounted Infantry.

Captain N. R. House, New South Wales, Medical Staff Corps.

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Original Contributions

THE ATTITUDE OF THE SURGEON TO PREVENTION OF CANCER

By Herbert A. Bruce, F.R.C.S., Eng.

Associate Professor of Clinical Surgery, University of Toronto; Surgeon to the Toronto General Hospital.

Cancer is one of the most common causes of death in elderly people; in fact some writers claim that since the mortality of tuberculosis has been to some extent reduced by the measures taken to prevent the disease, it is the most common cause. From a tabulated statement of the mortality from cancer between 1881 and 1910, issued by the Registrar-General for England and Wales, including the various countries of Europe, and also Australia and New Zealand, it appears that in most of these countries it has increased steadily during this period. Werner[1], who has examined the vital statistics of Baden for the last twenty-five years, finds that during this period the number of deaths from it annually has increased by about a third, the increase being as high as fifty to sixty per cent. in persons over sixty years of age. It is very slight in those between forty and sixty, and there is no increase at all in those under forty. Bertillon[2] has made a similar investigation in France and other European countries, and is of opinion that in most of those with reliable statistics cancer has doubled in frequency during the last thirty years. His statistics, in common with those of most other writers, indicate that the increase affects pre-eminently cancerous disease of the digestive tract; mainly the stomach and rectum. Mr. R. L. Hoffman,[3] at the meeting of the American Committee for the control of Cancer in November, 1913, stated that of the 70,990 deaths from cancer in the registered

areas of the United States during 1913, 39.5 per cent. were from cancer of the stomach and rectum. Bertillon suggests the possibility that the comparative frequency of the disease in the digestive tract may be due to the nature of the food taken or the manner of eating it, but the extensive investigations which he has made in this connection have afforded no confirmation of this theory.

In view of this high mortality it is obvious that prevention or arrest of development of this terrible disease is a very important problem. Extensive experimental investigations are being carried out with the object of discovering some method of dealing with it other than by operation, but at present the only effectual means we have of arresting the spread of malignant degeneration is by surgical excision of the tissues involved at an early stage when the disease still remains localized. It is true that a few cases have been reported from time to time in which spontaneous cure is said to have occurred, but it is more than problematical as to whether there is such a thing as spontaneous cure of cancer, and it is probable that in all these cases retrogression of the symptoms was only temporary, and that recurrence and metastasis subsequently led to a fatal result. This being so, it is obvious that in dealing with the reduction of the mortality of cancer our propaganda must be directed towards educating both the profession and the public, in a similar manner to that which has contributed so greatly to the reduction of the mortality from appendicitis and peritonitis, in the detection of the earliest symptoms and signs of cancer, and in the full appreciation of the grave risks which are incurred by delaying appropriate treatment.

Our attitude in regard to the problem of cancer is influenced by the fact that the disease invariably commences as a strictly localized lesion, and that for a certain length of time the cancer cells do not spread beyond this circumscribed area. By a surgical operation, undertaken at this early stage, we may therefore hope to remove all the cancer cells from the body, and thus give the patient a reasonable chance of permanent cure. If operation is not done, however, at this early period the cancer continues to develop, the cells penetrate into the surrounding tissues, and complete eradication becomes impossible.

In view of the fact that a very large proportion of cases of cancer can be cured if operated upon sufficiently early, the question naturally presents itself: Why should its mortality be so high, and apparently still increasing? Hartwell[4] gives the following reasons for this: (1) Carelessness and ignorance on the part of the physician; (2) Carelessness and ignorance on the part of the laity, and (3) Difficulty of diagnosis in some cases, more especially in internal cancer.

1. Let us consider for a moment or two the first reason, namely, carelessness and ignorance on the part of the physician. That this is in some cases responsible for delay in operation is indicated by the following statistics. Rodman[5] quotes the statements given below from the report of the Cancer Commission of Pennsylvania. Of 400 cases reported by physicians and surgeons throughout Pennsylvania only sixty-eight per cent. of superficial and forty-eight per cent. of deep cancers were operable when they came under the observation of the surgeon. In the superficial lesions the average time which elapsed between the detection of signs of cancer and operation was eighteen months, and in the deeper ones fourteen months; the average time between first consulting a physician and operation was from eleven months to a year. About one in thirty of the cases of cancer of the breast were not even examined at the first consultation with a physician, and in one case in six, ointments salves, etc., were prescribed. This needs no comment.

Hartwell states that the records of one of the large hospitals in New York show that 102 cases of carcinoma of the pylorus were admitted between 1905 and 1910, ten of which had previously been in a hospital for this condition. Seventeen had suffered from severe gastric symptoms for a year or more, and six others for six months. Only ten of the cases were operable, and in three only was radical operation successful.

In this connection I should like to refer to a case of cancer of the pylorus, which is under my care at the present time. The patient, J. Langer, aged forty-four, first presented himself at the Out-patient Department of the Toronto General Hospital in October, 1913, complaining of gastric pain and vomiting. He attended the Out-patient Department for three weeks. One

year later he was admitted to the Medical Wards of the Toronto General Hospital, complaining of the same symptoms. He remained there from October 9th to October 27th. The history states that he had pain two hours after eating, relieved by eating, and also vomiting at various times. A diagnosis of hyperchlorhydria was made, and he was discharged with the note that he was "improved." He was again admitted to the Medical Wards of the Toronto General Hospital on January 8th of this year, and it was not until February 9th that he was transferred to the surgical side, when I was asked to perform an immediate operation for pyloric obstruction, as the patient was then in a very weak state. He had practically retained nothing—not even fluids—during this period, and as a consequence he was very much exhausted, with a very small, weak pulse, and was in no fit state for operation. However, with the aid of 100 ounces of interstitial saline, we were able to do a gastrojejunostomy. At this time we found a carcinoma of considerable size in the pyloric end of the stomach, extending from the greater to the lesser curvature.

After the operation he was able to take plenty of nourishment, and improved so much that on March 9th we were able to do a partial gastrectomy, removing the entire growth, together with some enlarged glands along the lesser curvature, and a considerable margin of stomach to the left side, as well as an inch of the duodenum. The stomach was removed from a line dropped from an inch to the right of the point where the gastric artery joins the stomach vertically downwards. The glands on the greater curvature were found to be carcinomatous, and the growth was adherent posteriorly to the pancreas, and a portion of the anterior capsule of the pancreas had to be removed with it.

He has made a splendid recovery, but, of course, one cannot speak with any degree of confidence as to its permanence, owing to the glandular involvement. This case is a fair example of the opportunity given to a surgeon in gastric cancer.

2. With regard to the second point, namely, ignorance and carelessness on the part of the laity, although there is no doubt that the general practitioner is sometimes to blame, this does not by any means apply to all cases. In many instances the patient

is absolutely ignorant of the fact that certain symptoms and signs may be premonitions of cancer, and not being seriously inconvenienced by them for the time being does not think it necessary to consult a physician until the condition is so advanced that no benefit can be hoped for from operation. This applies especially to cancer of the internal organs, such as the stomach or rectum. Another reason for delay may be fear of a surgical operation.

3. The diagnosis may, in the early stage, be very difficult in cancer of the internal organs, as marked symptoms, more especially pain, are not infrequently absent until the condition has become too advanced for successful operative treatment.

It will thus be seen that the real problem is, not so much to improve the technique and extent of operation, but to educate the profession and the public in the importance of operation at the earliest possible moment after the appearance of the preliminary symptoms. With this object in view a Society has recently been formed in the United States by the American Medical Association, called the American Society for the Control of Cancer,[6] which aims at such education. The formation of this society was suggested by the success of the method adopted by Winter in East Prussia in regard to uterine cancer, and its scope has been extended to include that in other parts of the body. The society consists both of laymen and physicians, but all the work is done under medical supervision. Articles, written in simple and popular language, containing information with regard to precancerous conditions and the preliminary signs of cancer, are published from time to time in some of the best known magazines, and in addition popular lectures are given by physicians. The carrying out of the work is on similar lines to those which have proved so successful in dealing with tuberculosis.

A similar committee has been in existence for some time at St. Louis,[7] under the direction of the Barnard Skin and Cancer Hospital, and is doing excellent work. Members of the staff of the Hospital visit Medical Societies throughout the State, and also give addresses to Graduate Nurses' Associations, Visiting Nurses' Associations, etc. Pamphlets deal-

ing with the subject are sent out, and popular lectures given. Every effort is made to impress upon practitioners, nurses and the women themselves the imperative necessity of at once seeking expert advice on the first indication of suspicious symptoms.

The cancer problem, therefore, as it at present stands, simply resolves itself into early diagnosis and operation. The only hope for the patient is in the recognition of the symptoms at a time when it is still localized and curable, and delay is practically certain to result sooner or later in death from this painful disease. A point which cannot be too strongly emphasized is that in the beginning it is localized and curable, whilst in the later stages it is neither. The possibility of cure by early operation suggests the desirability of intelligent co-operation of the medical profession and the public in a deliberate endeavor to reduce its mortality, and it is highly desirable that certain elementary facts in regard to it should be better understood than they have hitherto been. The importance of the early diagnosis of cancer should be impressed upon medical students, and they should be told to bear in mind certain suspicious symptoms. The public also should be enlightened as to the first signs of the disease, and as to the possibilities of cure in the early stages.

An enormous amount of experimental and clinical work has been recently done in the endeavor to discover some specific reaction positively indicating the presence of cancer, and many tests have been devised for the investigation of normal and abnormal body fluids, secretions and excretions. Although so far not one of these tests has proved to be absolutely pathognomonic, some of the reactions appear to be of sufficient value to justify more extensive trial, and should be employed in doubtful cases.

In education on the subject of cancer great stress should be laid on the recognition of precancerous conditions, which are often present for some considerable time before the lesion becomes transformed from a benign to a malignant one. Examples of these are leucoplakia of the tongue, warts, moles, chronic ulcer of the lip, chronic diverticulum of the colon and chronic cystic mastitis. In the report of the Pennsylvania

Cancer Commission it is stated that such a transformation has been definitely proved in the case of all these lesions. Cancer has also been known to develop from gastric ulcer and lumps or nodules beneath the skin. All these conditions may be termed precancerous, as, although clinically cancer is not yet present, they may lead to it if no preventive measures are taken.

As the breast is a superficial organ it might reasonably be assumed that the diagnosis of cancer of it would be comparatively easy, but yet the reports of cases in literature show that a considerable number of them are not operated upon for a year or more after the first indication of a tumor has been observed. Of the cases coming to the Mayo Clinic twenty-five per cent. are so advanced as to be inoperable, and Deaver[8] states that thirty-one of the last 200 admitted to his Clinic already had extensive ulceration and metastasis.

Cancer in many parts of the body, including the breast and muscles, not infrequently produces no symptoms whatever in the early stage. In cancer of the breast a lump beneath the skin is usually the first thing noticed by the patient, and in most cases pain is slight or absent altogether until the condition has become too advanced for curative treatment. A lump in the breast, more especially in a woman over twenty-five, should always be regarded as a definite warning of cancer, and if treatment is delayed the chances of its becoming fatally malignant increase day by day. In some cases all of the diagnostic symptoms, such as retraction or elevation of the nipple, or enlargement of the axillary glands, are absent.

As we have seen from the report of the Pennsylvania Cancer Commission, however, the physician consulted is sometimes to blame for delay in operation, and in my opinion a physician who does not even examine a patient who tells him that she has a lump in her breast is guilty of criminal negligence. In cases in which a lump in the breast is unaccompanied by pain, both the patient and physician are sometimes to blame for waiting for this symptom, which unfortunately frequently does not appear until a very late stage of the disease.

As regards the results of operation in cancer of the breast, Judd[9] reports 708 cases operated upon in Mayo's Clinic, with

three deaths. Of those in which two years have elapsed since operation, forty-four per cent. are alive and well, as are also 23.5 per cent. of those operated on ten years ago. Salmon[10] reports 33.5 per cent. of cures in 108 cases. Deaver traced seventy-five cases for more than three years. Sixteen, or 21.3 per cent., remained free from recurrence, an average of seven years after operation, thirty-seven have died from recurrence, and six are now suffering from it. Of those remaining well after three or more years Deaver states that in only twelve per cent. was there retraction of the nipple, in eighteen per cent. attachment of the tumor to the skin, and that in none of the cured cases was the tumor adherent to the pectoral fascia.

My opinion in regard to lumps in the breast is that every lump should be removed, whether of a benign or malignant character. In doubtful cases a section is made, the extent of the operation being dependent upon the result of this. MacCarty and others, including Upcott,[11] Syms and Hartwell,[12] claim that chronic mastitis is not infrequently a precursor of cancer, and that for this condition the breast should be removed.

Meyer[13] states that extensive involvement of the axillary and infra-clavicular glands is not always a contra-indication to operation, and that from forty to fifty per cent. of such cases, upon which he has performed a radical operation, are living, and have been under observation for a year or more.

Excision for local recurrence is, as a rule, only a palliative operation, and there is but little hope of ultimate cure. Recurrence after a radical operation should not, however, be regarded as invariably indicating internal metastasis, as it may simply mean a recrudescence in activity of the cancer cells of the primary lesion.

There is often considerable difficulty in the diagnosis of cancer of the internal organs. Blood in the secretions, however, should always be regarded as a definite warning, and indicates the imperative necessity of a most careful and thorough examination, supplemented, if necessary, by exploratory laparotomy. Several cases of gastric cancer which have come under my own observation have previously had treatment for years for gastric discomfort, which they describe as "indi-

gestion," and a number of cases of intestinal cancer treated for constipation without the possibility of a malignant growth being suspected until the supervention of obstruction imperatively called for operation.

People should be taught that failure to cure in cases of cancer is more often due to delay than to any other cause. They are often reluctant to submit to anything out of the ordinary in the way of examination, but it should be borne in mind that the time at which diagnosis is most difficult, and can be made only after the most careful and thorough examination, often not without the help of laboratory methods, and even the X-rays, is exactly that at which operation can be undertaken with the most favorable prognosis as regards cure. Improvement in the results of treatment can only be obtained by the recognition of the disease at an earlier stage by means of prolonged and thorough methods of investigation. If the growth has already become so large that it can easily be perceived by a superficial examination little benefit can be expected from operation.

It cannot be too strongly emphasized that the application of remedies cannot prevent the spread of cancer. I should like to suggest that the Academy of Medicine should memorialize the Government to put a stop to a practice which is unfortunately only too common in the Province of Ontario, namely, the application of arsenical preparations by the laity to lumps which are assumed to be cancerous. Many of these cases come to us with secondary growths, when nothing can be done for them, whereas if operation had been undertaken at the time when these quack preparations were first used there would have been a reasonable probability of a favorable result.

Finally I should like to emphasize the point that at the present time the one and only cure for cancer is operation. The X-rays have been tried and found wanting, and although they may retard development they cannot be regarded as curative. Radium is undoubtedly of some benefit in superficial growths, but these may also be removed by other methods. I have seen a case of a rodent ulcer of the face, which had been treated by radium for a year. In spite of the treatment it continued to grow and gradually destroy the lower eyelid,

ultimately calling for surgery at a late stage, when it was difficult or impossible to obtain a good result. There is no objection to the employment of radium in some cases, or of the X-rays in other cases, as a supplement to surgery after operation, in the hope that the treatment may retard or prevent recurrence, and may influence some outlying cancer cells which we have been unable to reach by operation.

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Society Proceedings

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO

The College of Physicians and Surgeons of Ontario met in annual session on June 30th and July 1st. Considerable business was transacted during the short session.

By an almost unanimous vote the Council voted to instruct its legislative committee to secure evidence as to the activities in the province of osteopaths, chiropractors and other unlicensed practitioners. It did so on the motion of Dr. G. R. Cruickshank, of Windsor, who urged that such evidence be collected for submission to the Medical Commission, about to be appointed by the Ontario Government. He suggested that the registrar-treasurer of the council send out to licensed physicians copies of the definition of the word "practice" which the council had sought to have incoroporated in the Medical Act, and which would have excluded osteopaths, chiropractors and quacks from the province; that the physicians be asked to furnish data regarding cases treated by such practitioners and a list of persons who would be willing to testify before the Medical Commission if it were appointed. "It is up to us," he said, "to get a list of specific cases in which these men have humbugged the public in a scoundrelly manner. We attack men in the profession if they are guilty of mal-practice; we should attack men outside the profession who are guilty of mal-practice." He declared that it was the duty of the council to protect the public against fraud and imposition.

Dr. H. J. Hamilton and Dr. E. E. King supported the motion. The former regretted that there was no central medical association in Ontario in a position to express the views of

the members of the profession before the Legislature. The latter had himself given notice of a motion asking that $500 be placed at the disposal of the executive and the legislative committee for the purpose of investigating the methods and appliances of the osteopathic, chiropractic and other schools. He agreed that it was the business of the Council to know what men who claimed to be doctors were doing.

Dr. Henry Becker, of Toronto, and Dr. Arthur Jukes Johnson both agreed that the public was being humbugged but felt that the public invited it. Dr. Becker remarked: "Although the people try osteopathy and chiropractics, they are with us and they always come back to us." Dr. Johnson contended that it was not the business of the Ontario Medical Council to make investigations for the purpose of getting such evidence. The persons referred to by the mover of the resolution were not claiming to be licensed by the Council. The Council, therefore, had only to prosecute them when they violated its act.

Hearty applause followed the vote by which the regulation providing for reciprocity in registration with the general medical council of Great Britain, was adopted. The question has been before the Council on various occasions during the past eight years. The Ontario Council is the third provincial body in Canada to make an agreement with the British board. The regulation passed simply provides that persons registered by the general medical council of Great Britain may be registered in Ontario, upon making application and complying with certain formalities, and that in return licentiates of the Ontario Council shall be entitled to registration on the colonial list of the British Council without examination. Dr. Robert Ferguson, of London, and Dr. Cruickshank, were inclined to press for the addition to the regulation of a rider to the effect that the privileges granted to British physicians should not be extended to foreigners entitled to practise in Great Britain and Ireland. Other members, however, urged that the Council should not make a half concession to the authorities of the Motherland at the present time and they consequently allowed their proposal to drop.

The Council adopted the recommendation of the education committee that the executive correspond with the registrars of other provincial councils with a view to securing a uniform standard for matriculation; that a definite number of hours be assigned each term for work in each subject on the curriculum and that the revised British pharmacopeia be endorsed.

The finance committee recommended that $1,000 be voted for the relief of Belgian physicians and pharmacists. Dr. E. E. King said that the sum amounted to a contribution of 25 cents by each of the 4,000 licensed practitioners of the province. He urged that $2,000 be voted. To this Dr. McCallum, the chairman of the committee, replied, that the committee had considered $1,000 a large enough sum in view of the fact that the council would perhaps have the pleasure of voting a like amount for two or three years. However, the council voted to donate $2,000. Earlier in the day the members of the council contributed a dollar apiece for the purchase of tobacco for Canadian soldiers at the front.

Dr. H. Wilberforce Aikins, who was elected treasurer of the council on Tuesday, was, on the recommendation of a special committee, appointed registrar-treasurer with a salary of $2,000 a year.

Three cases were dealt with in the report of the discipline committee, and the recommendations of that body were accepted. Dr. Charles William Walker, of Toronto, was found to be conducting and managing the Ontario Medical Institute or Dr. Walker's Ontario Medical Institute, to have employed unregistered assistants there and to have published advertisements. He was, therefore, pronounced guilty of unprofessional conduct and instructions were given that his name be struck from the register. Dr. William Macdonald Adams and Dr. H. Alfred Turofsky were both found "not guilty" of unprofessional conduct. The former was reprimanded, however, for failing to keep a proper record of a sale of a narcotic.

Dr. R. J. Gibson, Sault Ste. Marie, who is president of the Dominion Medical Council, presented the report of the representatives of the Ontario Medical Council at the annual meeting of the Dominion organization. In so doing he gave

the arguments put forward in favor of placing the control of qualifying examinations in the hands of the Dominion Council. Dr. Jarvis, of London, replied that education was placed under the control of the provinces by the British North America Act. He said that the expense of conducting Dominion examinations would be great and that with Dominion control of qualifications the necessity for the provincial councils would disappear. Dr. Cruickshank said that with reciprocity between the Ontario Council and the British Council, many universities in Great Britain would be placed in a position to grant licenses to practise in Ontario. The Ontario Council would then have to hear the demand of universities in the province for a like privilege or else agree to the control of licensing by the Dominion Council. Even if we have to secure an amendment to the British North America Act, said Dr. Cruickshank, we will have Dominion registration. The report was adopted.

A resolution urging the Provincial Government to send a special expedition of doctors and nurses to the front to treat soldiers suffering from mental and nervous strain was passed by the Council before it adjourned on July 2nd. It was urged that either this be done or the sufferers brought home for treatment in Canada.

"Whilst efforts are being put forth by those in authority to give this special treatment, so far as the circumstances and conditions of war permit, nevertheless these circumstances and conditions are such as to render adequate treatment impossible," the resolution read, "and in consequence many of our brave young men are not receiving the care and chance for life and health which properly specialized and experienced medical treatment and nursing might give them."

The Council increased the vote of $500 to $1,000 for the investigation into the doings and methods of "osteopaths, chiropractors and quacks." The evidence collected will be presented at the next meeting of the Council. Dr. E. E. King, of Toronto, who moved for the increase, said that the only information now available about them was in the medical report of the Carnegie Foundation, and it was inadequate. With

the extra amount, he said that the Council could send doctors to investigate conditions at the colleges of these professions, which, he was informed, were poorly equipped and overcrowded.

Dr. Argue moved that a correct revised list of Ontario practitioners be prepared. His motion was adopted.

It was arranged also that a committee of the Council interview Premier Hearst to negotiate for public lectures in rural districts on farm sanitation. Sir James Grant, who moved that this be done, said that conditions on farms and in schools were often very bad, and that he thought such education would bring a considerable saving in infant life.

RETIREMENT OF DR. J. L. BRAY

THE many friends of Dr. Bray will regret his enforced retirement from his position as Registrar of the Ontario Medical Council, a position which he has filled so acceptably for a number of years. Dr. Bray has not been at all well for a year or more, and with difficulty attended to his duties. Here's hoping that he will soon regain his normal strength and be able to mix with his professional friends for still these many years.

Militia and Naval Medical Services and Ambulance

TORONTO UNIVERSITY BASE HOSPITAL

We were recently favored with the following most interesting letter from Captain (Dr.) N. J. L. Yellowlees, of No. 4 General Hospital, giving a racy account of the trip across the briny, and which, we know, will interest our readers.

"As you undoubtedly know we left Toronto on the 15th of May, and embarked the same night. Our party, that is No. 4 General Hospital, consisted of 38 officers, 73 nursing sisters, and 206 N.C.O.'s and men. Col. Roberts, the O. C. of No. 4, being the senior officer on board the "Corinthian," acted as O. C. for all the troops.

"Apparently you have heard of the rousing send-off which the Toronto people gave us, and which was very much appreciated by every one of us. We left port about daybreak Sunday, knowing not where we were going or anything at all regarding our passage. We were fairly comfortable on board, although somewhat crowded, and the men's quarters and accommodation were very good. We had a splendid passage over and in most ways a very uneventful trip, there being no deaths and no serious accidents on board. I think every officer and man enjoyed the restfulness of the voyage, and it was not so long as to make it monotonous. One night we got into a good deal of ice, and somewhat narrowly escaped a fairly large berg. I might say there was very little sea-sickness on board, but for only about 36 hours was the sea at all boisterous.

"One of the evenings on board was spent most enjoyably by holding a mock court martial on Lieut.-Col. ———— for stealing Captain ————'s car from outside the Military Institute in Toronto on a night in April. It appears that after one

of our weekly mess dinners at the Institute, Col. ————, on his way home, took Captain ————'s car in mistake for his own and had it locked up in his own garage when Captain ———— went to reclaim it. The event was an amusing one and helped to pass one night very enjoyably.

"On Monday, May 24th, in honour of Queen Victoria's birthday, all troops on board mustered and a 'Royal Salute' was given at 10 a.m., after which they all sang 'God Save the King' and gave three cheers for His Majesty. In the afternoon boxing matches were held amongst the N.C.O.'s and men (Lt.-Col. Hendry refereeing), and were very much enjoyed by all on board. In the evening all the officers gave a concert which was just as good as anybody could wish to attend.

"We arrived in England on the morning of Thursday, May 27th, every one of us very glad to put foot on terra firma again. I must just mention here that the last two or three days on board were somewhat anxious ones for a good many of us. Not up until a very short time before we arrived had we seen any escort at all, nor had we heard of one, and I assure you that it was with a great sense of relief that we sighted two of those pretty little 'destroyers,' which shot into our view like a bolt from the blue. They are certainly wonderful craft and caused the smile that did not come off on the faces of nearly everybody on board. In this connection our Orderly Room sergeant has just shown me the extract in his diary relating to this wonderful incident in our passage and I realize now that my description is much less vivid than the one which he has made in his diary, so that I have asked him just to give us a duplicate copy of this extract, which you will find herewith and which you may use as you see fit.

"As I said before we arrived in England on May 27th, and left that afternoon by train for our present headquarters at Shorncliffe. A more beautiful country I never saw nor do I think any of those who came along have seen. Devon was apparently just at its height of perfection, a regular Garden of Eden, with its beautiful green plains and hedges. When we first started out by train most of us thought we could put in our time playing bridge, and so forth, but practically all of us, I

assure you, spent every minute of our time admiring the beautiful country through which we were passing.

"Never in my life have I been so buoyed up as I was on the day of our arrival in England at the wonderful welcome and reception which the people all along the line gave us. It was really marvellous the way people turned out at their back doors, at their upper windows and from every corner of the houses, to wave and cheer and throw kisses at us. The strangest part of it all was that these people should have known that ours was a troop train, because I assure you our men were so well behaved that they could have had absolutely no warning of our arrival from any sounds or yells made by the men.

"We are certainly proud of the men we have brought over, and their conduct on the trip and since, has only reassured us of their general merit and good behavior.

"We arrived at Shorncliffe about 1 a.m., and the men marched directly from the station to our headquarters at St. Martin's Plain, Shorncliffe Camp, from the Orderly Room of which I am now dictating this note. Having no accommodation for the officers we are all forced, with the exception of one or two who are detailed to be in charge of the men, to quarter at the Hotel Metropole in Folkestone, a very beautiful spot right on the cliff overlooking the Channel.

"On account of shortage in our ordnance equipment, a matter which has to do entirely with the Militia Department, our progress has been somewhat interrupted and just when we will get started or where we are going is a mystery. Candidly speaking we have absolutely no idea what plans are in store for us. The only thing that we are hoping is that we will soon be able to get to the front where we can be of some service to our poor wounded fellows.

"Every officer of No. 4 is in splendid health, and without exception I think they are enjoying this life immensely, their only wish being apparently to get to work. However, we are so comfortably situated that there is no great kick even along this line.

"When the hospital is in actual operation I will endeavor to send you something really worth while, but as yet you can

understand it is absolutely impossible for me to tell you any more than just what has happened. In regard to photos I may say that cameras are absolutely prohibited from France. However I will see what I can do.

" Thanks for your good wishes and for the journals which you have sent me; I have not as yet received them, but no doubt they will be along in a day or two.

" All the officers join me in sending kind regards.

" Yours very sincerely

NORMAN J. L. YELLOWLEES,

" *Captain.*

" Adjutant, No. 4 C. G. H. U. of T."

N.B.—I may say that Captain Duncan Graham is still at the Duchess of Connaught Hospital, "Cliveden," at Taplow, doing special duty; that Major Amyot has been detailed as Sanitary Officer of the Camp, and that Major C. S. McVicar has been sent to the Duchess of Connaught Hospital in order to obtain some special line on his duties as Registrar.

WORD FROM MAJOR E. B. HARDY, OF TORONTO

A SHORT letter was recently received by Mrs. E. B. Hardy, of 688 Euclid Avenue, from her husband, Major Hardy, who is in charge of No. 2 Field Hospital in Belgium. He is quite well and says that the hospital is doing splendid work for the wounded Canadians and British.

WORD FROM MAJOR P. G. GOLDSMITH, OF TORONTO

MRS. GOLDSMITH, 84 Carlton Street, recently received a letter from Dr. P. G. Goldsmith, who is at the hospital at Treport, forty miles south of Boulogne. Dr. Goldsmith states that he has been very busy and many Canadian wounded have been brought in there. Among them are several members of the Queen's Own Rifles.

AN INTERESTING LETTER FROM CAPT. G. S. STRATHY

We had the pleasure of receiving recently an interesting letter from Capt. (Dr.) G. S. Strathy, who is now at Moore Barracks, Shorncliffe. Dr. Strathy described in a very picturesque manner their voyage from Halifax, which must certainly have been very interesting, particularly to those who suffered from *mal de mer*. Fifty hours in the train from Toronto to Halifax



NO. 2 CASUALTY CLEARING STATION.
Front row from left to right—Major Davey, Capt. G. S. Strathy, Lt.-Col. Rennie, Major Wilson, Capt. Bruce Robertson. Back row—Capt. G. B. Strathy, Lt.-Col. Osborne, Capt. Jackes.

is not a bad record, though it would seem that the officers had accorded to them every comfort in the way of Pullman cars, etc. Perhaps it might not be wise for us to mention as to whether the same condition of affairs existed on board S.S. "Northland," further than to say that five officers occupied every stateroom, in place of two. S.S. "Northland" was ac-

companied within a mile all the way across by S.S. "Grampian," S.S. "Cumberland" being detained by having stuck in the ice off the coast. All of the medical officers who sailed with No. 2 Casualty Clearing Hospital seem to be happy and enjoying their experience. All the way across the ocean they indulged in boat drill, physical drill, shuffleboard, etc. We are indebted to Capt. Strathy for a number of interesting postal photos, some of which we reproduce in this issue. We hope to be able to supply our readers with a page or two of news each month from this date, giving as full particulars as possible of the movements of the different hospitals, especially those who have left Toronto and its vicinity.

LETTER FROM LIEUT.-COL. J. T. FOTHERINGHAM

The following correspondence from Lieut.-Col. J. T. Fotheringham, now at the front with the R. A. M. C., will interest our readers. The enclosed clipping from the *Pall Mall Gazette* may be of interest to you for publication. "The three Canadian Field Ambulances with the First Division have done work that has never been excelled by any medical units in any service. If we of the 2nd Division are going to keep up their record we shall have to 'extend ourselves.' All are well here, the discipline and morale of the 2nd Division is promising to be very good.

"Eloquent tribute to the fine work being done at the front by the British Army Medical Services is paid by the well-known American correspondent, Mr. William G. Shepherd, in a further article he has sent to the United Press.

"To keep the army healthy (he writes) was naturally the first step of the R. A. M. C. in this war. Before there were any wounded men to look after, every town in the British zone in France was made scientifically sanitary. Under the R. A. M. C. in many towns street cleaning forces made thoroughfares and yards, houses, and even ancient castles and chateaux as germless as possible. The R. A. M. C. forces pursued germs as if they were the Kaiser's army. Soldiers, high and low, had to step about at R. A. M. C. orders. The medical man was supreme in his own fighting zone.

"Health regulations and sanitary orders were set out in each town; when the British soldiers came to billets in a town they found the same sanitary arrangements existing that would exist if they lived in a tented military camp of their own. All the refuse must be burned; even tin cans in which there had been food must be put into the fire. The germ chase was conducted regardless of expense, regardless of trouble. Incidentally, the latest R. A. M. C. order to the soldiers is "kill every fly on sight." A chase after fly eggs is also under way.

"The R. A. M. C. men go into the trenches, too, in their germ hunt. The slogan, "kill every fly on sight," is pasted up in dug-outs and trenches over which bullets fly incessantly. The trench soldiers are instructed how to live sanitarily, how to build toilet rooms as sanitary as those in a London dwelling; how to burn the remnants of their hurried trench meals.

"*I found the Canadian branch of the R. A. M. C. established in an old French prison. They had fought the germs out of it; they had whitewashed the ancient walls; the great yard—a mud-hole in winter—was as spick and span as a garden. It looked like Spotless Town.*

"All through the British zone I found R. A. M. C. bathhouses. Sometimes they were factory buildings or linen mills. The R. A. M. C. had used whatever came to hand.

"The R. A. M. C. fights insects as well as germs. It fights tiredness, too, and strained nerves.

"The business of keeping the army healthy is the least spectacular part of the R. A. M. C.'s work, but not the least important. Armies would fade away with disease, germs would be allies of the enemy, were it not for the work of the R. A. M. C. In the United States, during the Spanish-American war, we saw how our volunteers died like flies, and never got within a thousand miles of the enemy, because we did not have anything like the services which the R. A. M. C. is rendering in the British army to-day."

PERSONALS

Lieut. (Dr.) J. W. S. McCullough, Provincial Health Officer, has been promoted to the rank of major.

Dr. Bruce McMurrich and Dr. S. J. N. Magwood, of Toronto, were last month accepted for overseas service and will be attached to the A. M. C.

Dr. Velyien Ewart Henderson, M.A., M.B., of the medical faculty of the University of Toronto, has received an appointment from the militia as head of the Alien Prisoners' Detention Camp at Kapuskasing, Ont.

The White Company, of Cleveland, Ohio, have presented No. 4 General Hospital (Toronto University), with one of their splendid motor trucks, and the Daughters of the Empire in Cleveland have presented the same unit with a splendid White motor ambulance. The gifts are greatly appreciated.

Dr. R. D. Rudolph, of Bloor Street West, returned to Toronto on June 28th, on a six weeks' furlough. The doctor looked fine, and was as tanned as a berry. He said that he never felt better in his life and sailed again for France on July 15th. Dr. Rudolph is in charge of No. 2 General Hospital at Boulogne.

Dr. G. G. Nasmith, who was in charge of the laboratories of the Medical Health Department, Toronto, prior to his leaving for the front, has been given the water and hygiene work for the entire First Army Corps, and the bacteriological work for the Indian Corps, in recognition of his efficient services along sanitary lines with the First Canadian Contingent.

Dr. R. W. Bruce Smith, Inspector of Hospitals for the Province of Ontario, is confined to his home. The doctor spent a couple of weeks at Old Point Comfort, Va., in the early part of June, but not finding much benefit, returned to Toronto and spent a short time in Miss Rogers' Rest Home. We regret that our good friend is not showing much improvement. His condition is causing his family and professional friends a good deal of anxiety.

Dr. Harley Smith, of Harbord Street, spent a fortnight during July at the Jackson Health Resort, Dansville, N.Y.

Hon. Surgeon G. Sterling Ryerson, with his daughter, returned to Toronto from France on July 6th. Dr. Ryerson's son, Lieut. Ryerson, returned the same day, having been invalided home from the front.

Dr. Charles R. Dickson (consultant in electro-therapeutics to Toronto General Hospital), begs to announce to the medical profession that Dr. G. R. Reid is now associated with him in his electro-therapeutic practice, which will in future include the diagnostic employment of the X-ray.

Dr. Howard Kelly, of Baltimore, Md., spent a couple of days early in July with Dr. N. A. Powell, of Toronto, on his way to his camp on the Magnetawan River. Dr. Kelly occupied the pulpit of the Timothy Eaton Memorial Church on Sunday morning, July 4th.

We heartily congratulate our good friend Dr. J. N. E. Brown on his recent appointment to the responsible position of medical superintendent to the magnificent new Henry Ford Hospital at Detroit, Mich. This institution contains 2,000 beds and is the last word in hospital equipment. It will be completed this year, though several units are now ready for the accommodation of the patients. As our readers know, Dr. Brown filled most acceptably for a period of years the position of medical superintendent of the old Toronto General Hospital.

Mr. Irving H. Cameron, Professor of Surgery in the University of Toronto, has left for England to accept the position tendered to him by the British Government. He has been appointed Honorary Visiting Surgeon on the Staff of the King George Hospital, the great institution with 1,000 beds, recently founded in Waterloo Road, London, for the soldiers of the Empire who require treatment for their wounds.

Professor Cameron will be associated in his work with such other distinguished surgeons as Sir Frederick Treves, Sir Benjamin Franklin, Sir William Arbuthnot Lane and Mr.

Charters, all among the most eminent members of the profession and personal friends of Professor Cameron.

It is understood that Professor Cameron was the Ontario Government's first choice as head of the proposed hospital which the province volunteered. As, however, at the time of writing, it is still undecided as to whether the proposed hospital shall be a convalescing one or for acute cases, Professor Cameron was allowed to leave for England to assume his duties at King George's Hospital. The call to service with such a staff as that at King George's Hospital is a testimonial to Professor Cameron's rank as acknowledged all over both this country and England. The appointment meets with the approval of the entire Canadian medical profession, as Professor Cameron's ability as a surgeon is undoubted.

London, May 23.—Capt. Hervey Jackes, of Toronto, now at Shorncliffe, has been appointed Deputy Assistant Director of Canadian Medical Service.

MABEE.—On Friday, May 28, 1915, to Dr. and Mrs. Oliver Mabee, 419 Bloor Street West, a daughter.

Obituary

THOMAS WYLIE

Dr. Thomas Wylie died on June 25th at his residence, 685 Spadina Avenue, after an illness of six weeks. Dr. Wylie was born in Toronto in 1841. He practised in Manila, Duntroon and Stayner for 17 years, and was twice elected to the Ontario Legislature for West Simcoe as a Conservative. He came to Toronto in 1891, and continued his medical practice.

The Physician's Library

The Practical Medicine Series, Series 1914, *Volume VIII Materia Medica and Therapeutics, Preventive Medicine, Climatology.* Edited by Geo. F. Butler, Henry B. Favill, Norman Bridge. Chicago: The Year Book Publishers. Price of this volume, $1.50. The series of ten volumes, covering the entire field of medicine and surgery, $10.00.

This compact volume of 385 pages gives a resumé of the more important communications which have appeared in the medical journals of the world during the previous year on the special subjects of which it treats. The editing would appear to be only in the selection of the articles thought worthy of recording and in the space given to each there is no editorial comment. It seems a fair presentation of the principal literature. The whole series will be valuable to the practitioner who does not index his own journal articles, and the arrangement into volumes makes a convenient arrangement for those who wish only the literature of special subjects. J. H. E.

Vol. II Differential Diagnosis. Presented through an analysis of 317 cases. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard Medical School. Octavo of 709 pages, 254 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $5.50; Half Morocco, $7.00. Sole Canadian Agents, The J. F. Hartz Co., Ltd., Toronto.

This volume continues the plan of Volume I, which was reviewed in these columns some two years ago. It is a series of studies of clinical case records with comment by the author on

the differential diagnosis. The cases are classified under the outstanding symptoms—e.g., abdominal tumors, vertigo, diarrhea, dyspepsia, hematemesis, glands, hemophysis, edema of legs, swelling of arm, tremor ascites and eight other symptoms.

For the practitioner who is yet a student there are many hours of pleasant problem work in this volume, and it cannot but make him keener in his differential diagnosis. There are perhaps too many cases included in which a definite diagnosis is not reached.

The book is not to be classed with the systematic treatises nor the monographs, but is essentially a study of individual clinical cases, the course and outcome of which give light upon obscure cases which the physician may encounter.

J. H. E

Principles of Hygiene (fifth edition). For Students, Physicians and Health Officers. By D. H. Bergey, M.D., First Assistant, Laboratory of Hygiene and Assistant Professor of Bacteriology, University of Pennsylvania. Octavo of 531 pages, Illustrated. W. B. Saunders Company, 1915. Cloth, $3.00 net.

This will prove an excellent guide book for all those engaged in sanitary work, as well as for the physician himself. The demand for books of such a class will be increased by the large number of medical men taking up army medical work at the present time, and for such the chapter on Military Hygiene will be especially valuable. Here the matter of examining recruits, food, training, clothing, and information regarding the value of inoculation for typhoid are all briefly discussed.

The other chapters grouped under such heads as Naval Hygiene, School Hygiene, Industrial Hygiene, etc., are likewise sound and readable. The inclusion of a full set of the Quarantine Laws of the United States and also the Interstate Regulations will prove useful and enhance the value of this most useful volume.

Abdominal Operations, New. Third edition, enlarged. Two volumes. By Sir Berkeley Moynihan, M.S., (London), F.R.C.S., Leeds, England. Third edition entirely reset and enlarged. Two octavo volumes, totalling 980 pages, with 371 illustrations, 5 in colors. W. B. Saunders, Philadelphia and London, 1914. Cloth, $10.00 net; half morocco, $13.00 net. Sole Canadian Agents, The J. F. Hartz Co., Ltd., Toronto.

One who is acquainted with the writings of Sir Berkeley Moynihan agreeably awaits any of his new or revised works.

These two volumes, much enlarged, many chapters rewritten and well illustrated, comprise everything in abdominal surgery common to both sexes.

Each operation is so lucidly described that one cannot fail to follow every detail with keen interest and at the close experience a feeling of deep gratitude to the author. Unquestionably there will be a very great demand for this edition, as its value to the surgeon is inestimable, and to the general practitioner a great assistant. C. F. M.

Elements of Pharmacy, Materia Medica and Therapeutics. By Sir William Whitla, M.A., M.D., LL.D., Professor of Materia Medica and Therapeutics, Queen's University, Belfast; Senior Physician, Royal Victoria Hospital; Author of "Dictionary of Treatment," "Practice of Medicine" (2 vols.), etc. Tenth edition, forty-second thousand. London: Bailliere, Tindall and Cox, 8 Henrietta St., Covent Garden.

It is quite evident that this volume has been in great demand as it has so quickly reached this the tenth edition. The work speaks for itself. The present edition, up to date, to accord with the New. British Pharmacoepia, has been much changed. The science of pharmacy can only be learned by practical experience. The chapter devoted to this subject cannot but be useful to all students. A. J. H.

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Editorials

THE STUDY OF MEDICINE

It is a pathetic fact, in looking over the list of addresses of medical students, that the address generally given is that of a city in which a medical school flourishes. Only a few come from the country districts. A very few families move to the metropolis for the purpose of educating their sons in medicine. The fact is told by the oldest men now practising, as well as by the young boys who wish to attend a medical school and cannot afford it—that the practice and study of medicine now are only for the sons of the wealthy.

The course is none too long in years. Internships are of immense value. But, while the rich man's son *should* have brains and brawn, so carefully now are children reared, yet has he necessarily an aptitude for medicine or the human sympathy which every general practitioner has for the struggling poor? The rich man does not condemn his son to be a physician, though it is very noticeable that

rich men's daughters marry poor physicians more frequently than other professional men.

But why should not a farmer's son, living amongst domestic animals and observing their ways, visiting, too, the creeks and the woods, noting the habits of fishes and furred or feathered creatures, be better posted in the ills that human flesh is heir to?

The educational system of the country is conducted on very humane principles, fair and just, but its founders should *demand* more sympathy from the well-to-do public. There should be such a system of scholarships that any boy who will ultimately make good in medicine could work his way entirely through college and hospital and the first agonizing year of waiting for patients. Part of this the government can do, part the philanthropists, part the boys themselves in vacation periods.

FASHIONS IN DISEASE

JUDGING from the standpoint of the man in the street, it is not so very long since appendicitis came into vogue, and, instead of being a feature that need not have been regarded as obscure, and often missed, was now something sought after eagerly and invariably found, proving a fertile occupation for both surgeon and jokesmith, though much less remunerative for the latter. Just like the hobble skirt, this fashion had no sooner invaded the rural districts than the urban designers swiftly changed to " nervous indi-

gestion," and other various ills, many of which are unattainable by the poor, fortunately for them.

" When all fruit fails, welcome haws!" In clinical and pathological diagnosis pyorrhea is " haws." It seems almost impossible to find out what is the matter with certain patients, and when lavage, X-ray pictures, blood cultures, and Widals fail to reveal a definite cause for the general malaise and depression in these chronic complainers, it must not be overlooked that they are possibly suffering from Riggs' disease (receding gums, or pyorrhea alveolaris), the discomfort proceeding directly from the persistent pus formation and the dire effects of absorbing tainted food. It is a very astonishing fact that large numbers of people suffer from this condition without being aware of it; but when it is detected, and careful attention paid to the diet, the toilet of the mouth, and the cleansing of the intestinal tract, together with the skilful assistance of special dentists, the patient's health begins at once gradually and steadily to improve.

Patients with means prefer to go to the private dentist, even though he charge $25.00 per hour. But the hospitals are putting this curative treatment within reach of all who are not rich. The dental clinic not only takes care of the out-patients but also ward cases wheeled down in chairs in turn. It not only cleans and cures old cases, but by observation of the mouth prevents its occurrence in other cases as well.

This disease begins with a bluish discoloration at the base of the tooth, in the gum, followed by a visible

shrinking of its tissue and a slight exudation of pus, especially on pressure. This pus has a foul odor, and the patient never has a "good taste in his mouth." One day his wife declares he ate garlic, the next day she thinks it was Limberger, both of which deadly weapons are infinitely preferable to pyorrhea.

This condition can be observed in young adults, and from that on, at any period. Nurses on private duty, in the schools, and in district work should keep a vigilant watch for this condition, so insidious that it may go for years unnoticed.

Not enough attention is paid nor materials and equipment provided, to care for the teeth of patients in the hospitals as a rule, and any probationer in whom this is thoroughly drilled, to cleanse and *observe* her patients' teeth, in the morning and after feedings, will find many cases to report.

Many diseases of the stomach, nerves and blood have been named as the cause of some people's constant wretchedness, where the true cause to be assigned is pyorrhea. There should be no kissing by sufferers from this disease, not for danger of infection, but straight dirt, to be frank.

The X-ray can be used in advanced cases, to show whether so many roots are destroyed as to render it imperative to remove all the teeth.

The drug most employed by dentists in the treatment is emetine, in three methods: by hypodermic injection into the arm or back, by tablet in the mouth, and by injection into the pockets around the diseased roots. Emetine is an alkaloid of ipecac, and destroys the amœba buccalis, the cause of all this trouble,

related closely to the germ causing dysentery. This is a treatment which physicians cannot undertake, since it requires a special equipment. They have their own field, and must hand over gracefully to the special dentists all the sufferers from this condition, just as a great alienist must send his son to a competent surgeon for appendectomy.

But the wise physician is the man who detects these things and frankly classifies them according to the skilled workers who can treat them. He gains the confidence of his people, and ranks above the man who cares for a detail in a mechanical way.

A MEDICAL PROPHECY FULFILLED

In 1888 Dr. Louis Pasteur, admittedly one of the world's very greatest men, wrote as follows:—

"Two contrary laws seem to be wrestling with each other nowadays; the one, a law of blood and death, ever imagining new means of destruction and forcing nations to be constantly ready for the battlefield; the other, a law of peace, work, and health, ever evolving new means of delivering man from the scourges which beset him. The one seeks violent conquests, the other the relief of humanity. The latter places one human life above any victory, while the former would sacrifice hundreds and thousands of lives to the ambition of one."

Dr. Oliver Wendell Holmes conveyed a somewhat similar idea in his poem entitled "Two Armies":—

"One marches to the drum-beats' roll,
The wide-mouthed clarion's bray,
And bears upon a crimson scroll—
'Our glory is to slay.'"

And of the other army—

"Along its front no sabres shine,
No blood-red pennons wave,
Its banner bears the single line—
'Our duty is to save.'"

N. A. P.

Canadian Journal of Medicine and Surgery

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Original Contributions

THE TREATMENT OF ECLAMPSIA*

Methods used at the Toronto Western Hospital Obstetrical Department. Eight Consecutive Cases Without Maternal Death.

BY GORDON G. COPELAND, B.A., M.B.,
Assistant Obstetrical Surgeon to the Toronto Western Hospital.

Mr. Chairman, Ladies and Gentlemen.—

Eclampsia is such a serious disease, and its manifestations are often so sudden and appalling, that I feel a very short review of some of the outstanding features of this pathological condition, and of its rational treatment from a practical standpoint, may be of service.

May I briefly mention some of the salient points about the disease that will help us to better understand the principles of treatment?

Definition.—Eclampsia is an acute toxemia occurring in pregnant, parturient and puerperal women. Jardine says it may also occur in the new born children of these women.

The disease is generally manifested by tonic and clonic convulsions with loss of consciousness, frequently followed by coma. Convulsions are not always present.

Frequency.—It occurs in about 1 per cent. of women entering lying-in hospitals, but is subject to wide variations in different years, and in different institutions.

It is more frequent during the cold, changeable weather, and, to a certain extent, follows the incidence of acute nephritis due to climatic conditions. I might venture to suggest that

* Read before the Section on Gynecology and Obstetrics at the Annual Meeting of the Ontario Medical Association at Peterborough, Ontario.

certain epidemic diseases affecting the kidneys, such as scarlet fever, may affect a large number of girls at the same time and injure their kidneys. Years later when these girls marry and become pregnant, they form a group that is more easily affected by the toxemias of pregnancy, and thus give rise to a wave of eclampsia.

Most cases of eclampsia are in primiparae, 80% according to large statistics (Jellett). All the cases I have had in the Western Hospital have been among primiparae. The last three months of pregnancy have the largest number of cases. The disease increases in frequency the nearer term is approached.

Mortality.—Taking the country as a whole, about 25% of the women die. The fetal death rate is very high. It goes over 50%. In our series, in all the cases that had convulsions before admittance to the hospital the fetuses were already dead when the women came under our care. In the post-partum case the child was saved and showed no evidence of the disease.

Etiology.—This condition has been called the "Disease of Theories." I have no knowledge of the chemical composition of the poison which we suppose exists. May I mention in passing a few of the theories that have held sway from time to time.

Predisposing causes are to be found in acute and chronic nephritis, in primiparity, a neurotic temperament, in the long retention of waste products, excessive size of the uterus from hydramnios or multiple pregnancy, or obstructed delivery (Jellett).

Frerich's urea theory, the uremic theory, the auto-intoxication, the infectious theory, the neurotic, the ovular, the anaphylactic and thyroid theories, all have their exponents and opponents. It seems to me that the poison is elaborated in the placenta and gets into the blood stream easily, and is carried throughout the body, affecting the liver, kidneys, brain and heart especially, and in proportion to the concentration of the poison and the ability of the different organs to deal with the toxin. I think that there is a specific eclampsia poison, or group of poisons, probably of protein composition. It is probably a colloid, hence is not readily removed from the circulation by

purgation. This may even be produced in a normal pregnancy, but be eliminated, with a minimum of damage, owing to the integrity of the organs dealing with it, and their continual efficient functioning. This real, though unidentified poison does not always give rise to eclampsia, as you know, for we have the pre-eclamptic condition, which, if properly treated, will terminate in avoiding eclampsia. To my mind, the question of whether a woman having this poison circulating in her system will have eclampsia or not is a matter of the concentration of the toxin at any one time, and the flash-point, if I may use the term, of the particular individual affected.

The Pathology of the Disease.—The chief changes produced in the various organs are congestion, hemorrhage, degeneration, and necrosis. The liver, the kidneys, the brain and heart are the organs most vitally affected. I think that there are *two* distinct clinical types of the morbid process to be distinguished, and they depend upon the organ more affected.

The Liver Type of Eclampsia.—The patient is jaundiced, vomits, has a tendency to hemorrhages, changes in the urine are not marked, albumin is small in quantity, the blood pressure is not high, convulsions are not marked, coma is common, there is little if any edema, and the pulse is poor. These cases do badly. The post-mortem findings are pretty constant and the characteristic changes are to be seen in the liver. If death has been delayed a few days, the liver is frequently shrunken, the capsule wrinkled, and, on cross section, the liver looks a mottled red and yellow. It is very much like the liver of acute yellow atrophy and delayed chloroform poisoning, or phosphorus poisoning. I have seen cases where it was difficult to find any healthy liver tissue left, almost the whole of the parenchyma being destroyed. The lesions in the liver vary from granular and fatty degeneration, to actual necrosis. Cragin and Hull say, "This necrosis begins at the centre of the lobule, and extends toward the periphery, leaving only a mass of granular detritus surrounding the central vein, the nuclei and cell contents disappearing with only a reticular network in the place of the liver cells. Thromboses with hemorrhage occur throughout the lobule more often than at the periphery. The organ may

be swollen or diminished in size, according to the change in the parenchyma. It usually shows a yellowish color and may have hemorrhages under the capsule." (Confirmed by Delafield and Pruden.)

The Kidney Type of Eclampsia.—This is characterized by (1) a high tension pulse, (2) severe headache and epigastric pain, (3) nervous symptoms are marked, (4) edema is generally present, (5) The urine is scanty, of high specific gravity, and contains a large quantity of albumin, blood casts, granular and hyaline casts, and frequently free blood. On boiling, this urine frequently goes solid. The total nitrogen excreted is markedly diminished. These cases usually have severe convulsions. The post-mortem findings are naturally most marked in the kidneys. The kidneys are swollen, the cortex thickened, pale and congested, the markings less distinct, and the capsule not adherent. Microscopically, the cells of the cortical tubules are swollen, in many places disintegrating. The vessels are injected, and the tubules contain much granular material. (Cragin.) At other times there are areas of actual necrosis. In short, we have an acute toxic nephritis.

Eminent authorities claim that the liver lesions are characteristic of the disease (Williams, Jürgens, Klebs, Pilliet and Schmorl, etc.), on the other hand, equally famous men say the essential lesions are in the kidneys (Winkler, Knapp, etc.), I think that a fuller explanation is that both organs are affected and, when very unevenly so, that organ the more affected dominates the pathological picture, and presents a distinct type.

The brain may have edema, anemia, thrombosis, and necrosis. Degenerative changes also occur in the heart to an extent clinically detectable, and clearly marked post-mortem. The spleen, pancreas, and other organs are affected.

The causes of death are of interest in that they show what to avoid, where this is possible. Asphyxia, exhaustion, heart failure and shock, toxemia, edema of the lungs, septic aspiration pneumonia, anuria, cerebral hemorrhage and thrombosis, and edema of the brain, acute yellow atrophic and necrotic hepatitis, and acute nephritis.

Diagnosis.—Eclampsia has to be distinguished from phosphorus poisoning, which simulates the liver type of eclampsia,

and convulsive poisons such as strychnine, from uremia, epilepsy, hysteria, malingering, etc. From a practical standpoint, however, there is rarely serious difficulty. If a pregnant woman comes into the hospital with a history of having had convulsions, and on catheterizing her, a small amount of urine is obtained which has a high specific gravity, albumin and blood, granular and hyaline casts, free blood, and there is edema of the tissues, a high blood pressure, coma, or jaundice, I make a working diagnosis of eclampsia and treat accordingly without delay.

Prognosis.—This should always be guarded. Stroganoff has the best records of a large series of cases, 6.6 per cent. in 400 cases. From that the mortality goes up to 66 per cent. Generally the greater the number of fits the poorer the outlook. Eclampsia at the sixth month of pregnancy is usually more dangerous than at term.

The onset of jaundice nearly always indicates a fatal termination. A weak, fast pulse and anuria are very grave signs. Sudden and almost unexpected death after apparent improvement must not be forgotten. Only about 1 per cent. of cases recur, and there is usually a chronic nephritis underlying this.

The Treatment of Eclampsia.

Through the kindness of my chief, Dr. Albert A. Macdonald, the Associate Professor in Gynecology and Obstetrics, I have been given a free hand in the choice of methods used, and the opportunity to present this paper. From personal experience in such great international clinics as the Sloane Hospital for Women, New York, the Rotunda Hospital, Dublin, and others, I have chosen those methods which seemed to me to give the best results. We have now elaborated a plan of action to be used in the treatment of eclamptics at the Western Hospital, subject to such variations as are needed by individual cases. While each step has been used and commended highly by various authorities and heartily condemned by others, the technique we now follow is not generally adopted elsewhere to the exclusion of most other procedures. I contend that the treatment we use is as rational and scientific as our knowledge of the disease will allow.

To be generally and successfully carried out, a technique must be simple and the apparatus uncomplicated and cheap. We are training our house surgeons and students for actual possible practice. Therefore, while immediate vaginal section has given good results in selected cases in skilled hands under ideal conditions, this state of affairs occurs to but few. The intelligent country practitioner can carry out everything essential in our technique.

Just how far we may carry certain procedures, no matter how excellent in themselves, must ever be a matter for most careful judgment.

Prophylaxis.—"Prevention is better than cure." In a large number of cases, eclampsia may be prevented when the danger is known. "Forewarned, forearmed." The public should be educated to take preventive measures against disease. The day will soon be here, I trust, when the life of a woman or child will be considered of greater value than that of a hog. Most of the accidents and preventable diseases associated with child-bearing can be forestalled by simple investigations honestly carried out during the course of gestation. I should earnestly plead with the profession as a whole for greater care to be taken of pregnant women. A few dollars spent in monthly examinations, especially of the urine, and the blood pressure if need be, would prevent many of the terrible accidents.

A pregnant woman who has daily efficient bowel movements, who passes over 50 ounces of urine of normal specific gravity, who drinks a sufficient volume of water, who perspires moderately, has a daily bath, is without headaches, dimness of vision, who eats rationally, exercises in reason, has a normal blood pressure, whose urine has no albumin or casts, will certainly not have any eclampsia.

On the other hand, a pregnant woman who is greatly constipated, passes a high-colored urine, with albumin in it, has a high blood pressure, headaches, dimness of vision, epigastric pain, and vomiting, is very likely to have eclampsia. This woman should be put on a purin free diet, well purged, and plenty of fluids got into her and her skin got acting. If in spite of this the condition persists, have a consultation, and induce labor without shock or trauma.

Actual Technique of Treatment.

There is a logical reason for the order we follow. We try to control the fits as soon as possible, without adding further damage to the poisoned organs.

(1) Give one-half a grain of morphine sulphate, hypodermically, and repeat, using one-quarter grain as soon as necessary. Do not give chloroform; it increases the damage without doing any good except to ease the feelings of the onlookers. It has been definitely settled that the convulsion *per se* is only a severe effect; the cause is the high blood pressure where it exists, and the toxic condition of the nervous system. The morphia depresses the nervous system and decreases metabolism and relieves the heart. Its one bad effect, that of retarding the breathing, can be overcome by plenty of fresh air or inhalations of oxygen. The latter is good, for there is always a decreased oxydation in eclampsia.

(2) Prevent the patient from injuring herself; have a sheet tied over her, so she cannot spring out of bed. In a fit, place a rolled handkerchief between the teeth to prevent the tongue being bitten, and turn the patient on her side to prevent the aspiration of vomitus, infected secretions, etc., that might easily give rise to an aspiration pneumonia.

(3) Remembering constantly that eclamptic women are very easily infected, and taking every precaution to avoid sepsis, give 1,000 c.c. of normal saline at 100 Fah. under the breasts, not into them. The sterile normal saline, being a very stable salt solution, is not likely to add to the sodium concentration present in eclampsia. I have the area into which the needle is to be injected painted with tincture of iodine, 2½ per cent. iodine in ethyl alcohol. This hypodermoclysis is of the utmost value in diluting the toxins and preventing thrombosis and inducing diuresis. Jardine, of Glasgow, has had very fine results with it. He adds sodium acetate. Williams and De Lee are very favorable to it.

(4) Withdraw a quantity of blood by aspiration of a vein, under antiseptic and aseptic precautions, or do a venesection. This directly lowers the blood pressure and removes a definite amount of the eclamptic toxin which is causing the convulsions

and the high blood pressure. The amount of blood to be withdrawn is a matter of good judgment. A big, plethoric woman who is cyanosed can stand the withdrawal of 20 to 30 ounces easily, with the greatest benefit; the volume of the blood is replaced by the saline. In an anemic, emaciated woman, with low blood pressure, the abstraction of five or ten ounces of blood does good. The underlying principle of removing an inorganic poison from the stomach in poisoning is just the same. There may be considerable difficulty in getting any blood, for the tendency for the blood to clot is very great. Cases where it is at first impossible to get any blood from a vein, after the lapse of a couple of hours, become easier, because the blood is diluted by the saline. In one case I shall quote later, that of post-partum eclampsia, the withdrawal of twenty ounces of blood had a most dramatic effect. I have never seen a case of eclampsia where definite good was not accomplished by the withdrawal of blood. I have never seen a case of eclampsia followed by post-partum hemorrhage. Most of the recent works strongly recommend blood letting (Williams, De Lee).

(5) Empty the uterus. Carefully examine vaginally to ascertain the condition of the cervix. If it is soft and will admit three fingers, get the woman prepared for instrumental delivery. Give a general anesthetic. Nitrous oxide and oxygen are the best, then comes ether. The cervix can now be carefully dilated with the gloved fingers to full dilatation and forceps carefully applied, using axis traction if possible. If the child is dead, and it very frequently is in hospital practice, do not hesitate to do a craniotomy if the head is large or the outlet small.

In case the cervix is rigid and small, use a good type of hydrostatic bags. In my opinion they are by far the safest and surest means of dilating the cervix without trauma or shock, and they imitate Nature's bag of waters. The cervix can be opened by a Goodell dilator enough to admit one finger, and then put in number one Voorhees' bag and dilate. As soon as this comes through, replace by number two. I sometimes use traction of two or three pounds to hasten the dilatation. Frequently, when number two has come through, the cervix can be further dilated manually. Don't be in too great a hurry. Avoid

trauma and shock. If more than a couple of hours have elapsed since the first convulsion, the matter of taking a few hours extra to gradually dilate and carefully deliver will not only do no harm, but be productive of good. (Confirmed by Bumm's statistics.)

(6) Eliminations. (A) By the Intestinal Tract.—Give several enemas. When the bowel is unloaded, give a large enema of magnesium sulphate, two ounces dissolved in a small quantity of water. An enema I have given frequently is called a one-two-three—one part glycerine, two parts magnesium sulphate, and three parts water. This is usually effectual. Having cleared the bowel, start giving tap water, about 110 Fah. Saline is not necessary. If possible wash out the stomach and put down two ounces of magnesium sulphate. This is by far the best purgative, as it gets rid of a large volume of fluid, and any of the magnesium absorbed helps to calm the nervous system without the dangers attending the intravenous injection of magnesium sulphate, which has met with some success in controlling the convulsions in eclampsia as in tetanus. There is some danger, however, of respiratory failure in this latter procedure. Croton oil should not be given to a weakened patient, as it is very depressing and may turn the tide against her.

(B) By the Kidneys and Skin.—Hot packs and stupes are of the greatest service in overcoming the spasm of the superficial bloodvessels and thus lowering blood pressure. They calm the nervous system and help in an indirect way to induce diuresis by relieving the spasm of the renal vessels. Do not be misled as to the value of hot packs. Directly they do not remove any more of the eclampsia poison than they would strychnine taken by mouth. Hot packs and baths can easily be overdone and the patient exhausted. A profuse sweating after a hot pack is a favorable sign that the body is reacting. It usually means that the kidneys are being relieved at the same time.

Complete anuria is, of course, a very grave sign. If the condition persists more than twenty-four hours in spite of all these measures, the patient is very likely to die. I think that when all these measures have been carefully tried for the twenty-four hours without success, the only hope is in decapsulization

of one or both kidneys, as practised by Edebohls. An acute toxic nephritis is present, and the kidney capsule being relatively inelastic, and the kidney being engorged with blood to the extent of shutting off the circulation even, then only operative measures are likely to give any relief.

Short of this desperate condition, I think hot stupes to the loins and cupping are of as much service as in acute nephritis.

I do not give veratrum viride, as it only adds another poison and is dangerous if potent. Except in large hospitals, however, it is likely to be inert. It does only harm in those cases of low blood pressure. All the good claimed for it can be obtained in other ways, as I have shown. It is now being condemned. (De Lee.)

Do not give pilocarpine. It is very likely to lead to an acute edema of the lungs, and the sweat it gives is frequently the death sweat.

Accouchement force is a device worthy of the highest praise of Prussian Kultur. The tearing apart of a rigid cervix by the rapid stretching of a Bossi dilator, with the certain prospect of grave injury to the woman and severe shock, if not of speedy death, is most reprehensible.

If there is evidence of dystochia due to the bony parts of the mother being too small or the child too large, if still living, an abdominal Cesarean section is indicated. By using proper protection (such as Halbertsma did not), nerve blocking, etc., after the manner of Crile's anoci-association) the patient can go through the laparotomy with very little shock. Always remember that delivery is not a certain guarantee that the convulsions will stop. Dührssen and Braun claim most convulsions cease after delivery, if this is effected immediately after the first convulsion. Nearly twenty per cent of eclampsia occurs post-partum. (Williams). Where the convulsions continue after delivery, do not hesitate to bleed the patient.

Where the patient has been catheterized or had internal examinations, I give ten grains of hexamethyline tetramine three times a day, dissolved in plenty of water.

(7) *Ice Cap to Head.*—High temperatures are very grave in eclampsia. I have had an ice cap applied to the head in sev-

eral cases with apparently good results. It calms the nervous system appreciably.

In cases of great depression, where the circulatory system needs stimulation, I think that the aromatic spirits of ammonia and atropin are good.

I have not tried hirudin (leech extract) as recommended by Dienst, but it does not sound good, for it does not remove the cause.

To recapitulate, use morphia, subcutaneous injection of saline, withdrawal of blood, the use of hot packs, the induction of labor and delivery without shock, the emptying of the gastro-intestinal tract followed by purgation, ice cap to the head, and quiet, are means at our disposal which give the best results in eclampsia.

Case Histories.—I shall only give you partial accounts of three cases. They will serve to show, not a perfect technique, but a gradual improvement with very certain and gratifying results.

(1) Mrs. Annie G., age 19, Scotch, primipara, six months pregnant. Had had several convulsions outside before admittance to Toronto Western Hospital. Patient is a strong young woman of about 125 pounds weight. When first seen, at 4 p.m., she was in coma which alternated with the most violent convulsions, needing three persons to control her. She was given a small amount of chloroform until she could be got under the control of morphia. Her blood pressure was S 140 and D 90. A catheter specimen of urine showed a high specific gravity, loads of albumin, granular and blood casts. Her people said that she had had severe headaches and vomiting. As soon as I could get her sufficiently quiet, I tried to get some blood from the veins of the right arm. The blood was so thick that it would not pull through a large needle. I then cut the median basilic vein across, but there was only a little oozing, and clotting occurred at once. I then tried the other side without success. Then I tried to get some blood out of the jugular vein, but again the blood was so thick that I was unable to withdraw it through a large needle, so I desisted from further attempts to get any blood, and gave 1,000 c.c. of sterile normal saline under the breasts. The convulsions ceased, and I gave one-quart-

er of a grain of morphine sulphate. One minim of croton oil had been given by the house surgeon before my arrival. A hot pack was given for thirty minutes, and enemas were more or less successful. At 8 p.m. Dr. McPherson, the house surgeon, was able to get four ounces of blood from the left arm. The blood clotted at once, and the superficial veins of the arm thrombosed. This precluded further attempts and the wounds were dressed properly after each incision. Repeated examinations failed to show any fetal life. At 8.30 Dr. Macdonald and myself saw the girl again. The cervix was still hard, but would admit the tip of one finger in the external os. A hot one-per-cent. lysol douche was given, and at 11 p.m. Dr. McPherson put in two glycerine ichthyol tampons. At midnight another 1,000 c.c. of saline were injected. The bowels now began to move freely, and at 3.15 a.m. the head presented, and Dr. Hollis, our senior house surgeon, expressed the fetus, and shortly after the placenta and membranes. Very little blood came away and the uterus firmly contracted. The patient was very much better and slept during the early morning. Rectal enemas were now given of water, and the patient was given one ounce of magnesium sulphate. The urine increased to twenty ounces in the twenty-four hours. On December 9th, 1914, the urine was cloudy still, acid, 1021 sp. gr., loads of albumin, no sugar, granular and hyaline casts, red blood cells, leucocytes and epithelium. December 13th, urine clear amber, albumin present, but less red blood cells. December 19th, urine clear amber, 1023, no albumin, no sugar, a few red cells and epithelium. The patient sat up on the seventh day and made a very good recovery.

(2) Miss Hilda S., age 21, Finlander, primipara, admitted March 26th, 1915, at 7.30 p.m., in labor. Normal delivery of a seven-pound female child; very little blood was lost; a slight laceration of the mucous membrane occurred. I saw her for the first time just after the birth of the placenta. She had been given chloroform as the head was coming over the perineum. I felt her pulse and there was no abnormal tension. So far as I know no analysis of the urine had been made, though I had assumed that it had and everything was normal. At 1.30 a.m. the patient complained of a severe headache, and was given

aspirin. Of course, the urine should have been examined by the house surgeon, but was overlooked. At 1.40 a.m. she had a convulsion lasting three minutes. She frothed at the mouth and was very cyanosed. She was given one-eighth of morphia. At 2.15 a.m. she had another fit similar to the first and was given another one-eighth of morphia. We had a new house surgeon and he was not so familiar with my practice in these cases. At 3.45 a.m. she had another convulsion, was very much cyanosed, and a very weak pulse. A catheter specimen of urine was now taken and sent to the laboratory. It was loaded with albumin and had many casts, kind not noted. The patient was given an enema with good results. Three convulsions occurred between 7 a.m. and noon. Two ounces of magnesium sulphate were given after the stomach was washed out. I was only notified now; I had been given to understand by telephone that the patient had developed puerperal insanity when she realized that she actually had a child. I was thus misled as to the actual condition. When seen at 1.30 p.m., the patient was in a hot pack, so I left orders for an interstitial injection of sterile normal saline and the withdrawal of blood. I ordered 1-200 of a grain of hyoscine hydrobromide in addition to another one-quarter grain of morphia. When I left the patient she was talking somewhat sensibly to me through an interpreter, but complained of a severe headache. Shortly after I had left, before the hot pack was finished, she had a very severe convulsion which lasted five minutes. Artificial respiration had to be resorted to. Then my orders began to be carried out. A one-two-three enema was given, followed by a hot s.s. enema. She had very marked varicose veins of the vulva, and while getting ready to catheterize her, the house-surgeon noted that one was just about to burst, and, getting a dish, he just had to touch the vein and the blood gushed out. Twenty ounces were collected in this unique way, and then the bleeding was stopped and a dressing applied. Shortly after this she began to twitch a little, and, fearing another convulsion, the house-surgeon gave a little chloroform. She was seen at about 4 p.m. by Dr. Macdonald, who ordered twenty grains of potassium bromide to be given by bowel. She did not retain it, however. She passed a fair night and was given 1½ ounces of magnesium sulphate in

the morning. There was still albumin in the urine, but the total quantity of urine passed in twenty-four hours was increased, and gradually the urine cleared up. From the time of the first convulsion until the disease was well under control was about twenty hours. The remainder of the convalescence was without anything of sufficient interest to record. The urine was cleared up on discharge. The temperature went to 100.8 after the second convulsion, and gradually fell.

The last case I shall give a synopsis of is one of the worst I have ever seen, and I consider we were very lucky to have saved the woman.

Mrs. Rosie L., age 20, Russian Jewess, primipara, a patient of Dr. L. J. Solway, who was called in an emergency and sent her, very wisely, to the hospital at once. She was admitted March 20th, 1915, at 8.30 a.m. She had had three convulsions at home, and was in a condition of coma when brought in by Dr. Solway. At 8.45 she had another convulsion lasting three minutes. She was given one-quarter grain of morphine sulphate by Dr. Baker, the house-surgeon, and two minims of croton oil by mouth. She, however, vomited it, and continued to vomit a quantity of dark green fluid. I was summoned to the hospital, and examined her. I had her given a stomach lavage and a couple of ounces of magnesium sulphate given by the tube. I then had 1,000 c.c. of sterile normal saline given under the breasts. I asked Dr. Macdonald to look at her with me, and we decided on emptying the uterus as soon as we could get the cervix fully dilated. It was then very rigid. There was a nearly full-term fetus to be palpated with difficulty owing to the uterus being very tightly contracted on it. An anterior vertex presentation was made out, but the fetus was considered dead as no movements nor fetal heart sounds could be discovered. She was given an enema and got ready for the operating room. Under light ether anesthesia, I catheterized her and gave a hot one-per-cent. lysol douche, and then with care dilated the cervix with a Goodall dilator until it would admit one finger. I then introduced a No. 1 Voorhees' hydrostatic bag and filled it and clamped it and put a string on the end of it for traction, and sent the woman back to the ward. The pulse on beginning the anesthetic was 100 and poor, and the patient was comatose.

The urine went almost solid on boiling with the large amount of albumin. There were blood and granular casts.

At 2.30 p.m she had another convulsion; no urine or bowel movements had occurred up to 5 p.m., when I again visited her. The bag had not yet come through. She had another severe convulsion lasting about four minutes, and went into a state of coma afterward. I had her taken to the operating room again about 6 p.m. On very slight traction on the bag it pulled through. After a preliminary lysol douche, I examined her again, and the cervix was still rigid, though very thin. I put in the No. 2 bag under light ether anesthesia. I then pulled on it slightly, and the cervix suddenly relaxed and the bag pulled through after about five minutes. I again examined and found the cervix dilatable, and the head engaged at the superior strait in an L. O. A. position. I dilated the cervix manually to full dilation, and then applied the Copeland axis traction solid-bladed forceps, and attempted to deliver. Unfortunately, however, though the forceps held splendidly with no sign of slipping, the head I found to be hydrocephalic, and after some little delay I had to perforate, and then delivered with the forceps. The solid blades protected the maternal parts against the jagged edges of the perforated skull. She was given 1,000 c.c sterile normal saline under the breasts, and several ounces of blood were lost after the delivery. The placenta and membranes were removed manually and a hot inter-uterine lysol douche was given. She was returned to the ward at 7.30, pulse weak and respirations rapid and shallow. She was ordered to have camphor in oil, grains 3 q. 4 h. At 10 p.m. I again visited her. She was still vomiting and out of the anesthetic. I had her given a one-two-three enema. I ordered her to have 1-150 of a grain of atropine sulphate hypodermically. I visited her in three-quarters of an hour and found that the enema had been fairly successful. I ordered her to have six ounces of saline by the bowel every four hours. She was allowed to have malted milk, water, and weak coffee by mouth. By morning she was considerably better, still no urine was voided as yet.

She was given ten grains of urotropine in hot lemonade every four hours. The lochia was moderate in quantity. I saw her in the morning again and she was considerably better. At

11.10 a.m. she had another convulsion lasting several minutes. (She had voided ten ounces of urine at 10 a.m.) She went into a state of coma after the convulsion for about ten minutes. At 11.50 she was resting quietly and was conscious. The blood pressure in her case was never high. 120 mm. of Hg. Tycos. before and during one convulsion. The bowels moved freely. At 2.10 p.m. she had another convulsion. There was a very offensive odor from the mouth. I saw her again at 3 p.m. and ordered two ounces magnesium sulphate by mouth and another one-two-three enema. This was followed by a free evacuation. At 6 p.m. she had another convulsion. Tap water was now ordered to be given by bowel. For the next two days there was nothing of importance; the urine was increasing to about twenty-five ounces per day. She had some cough; slept fairly well. Orders were left for the withdrawal of blood and for a subcutaneous saline if there were any more convulsions.

March 24th.—Patient has a severe headache. Seems dazed. Bowels are moving freely. Slight twitching of the muscles of the extremities. Slept most of the day. Restless and twitching and headache. At 6.15 p.m. given one-quarter grain morphine sulphate hypo. Bowels moved freely. At 7 p.m. she had another convulsion. Dr. Baker withdrew four ounces of blood and put her in a hot pack. There was no reaction to this. At 10 p.m. she had another convulsion which lasted a long time. She was put in a hot pack for half an hour and sweated well. She was very violent. Tap water was given by the bowel continuously. At 1 a.m. she had a convulsion, was very cyanosed and very weak; thready, low-tension pulse. Dr. Beatty, our pathologist, who was available, withdrew fourteen ounces of blood, and Dr. Baker gave about 1,500 c.c. of sterile normal saline under the breasts and into the axillae, and gave one-quarter of a grain of morphia hypo. Urine was voided involuntarily. The pulse improved and she had no more convulsions. Although she had severe headaches for several days after this she gradually improved and the urine increased in volume and the albumin gradually disappeared. I have examined the urine repeatedly, and there is not the slightest trace of it. She was naturally weak for some time, and a few days ago her blood showed 75 per cent. hemoglobin. She has lately

come to me privately and the uterus is subinvoluted, but gradually going down under hot douches and glycerine ichthyol tampons. I am giving her hypodermic injections of iron and arsenic, Zambaletti, with some improvement.

Thus it will be seen that in actual hospital practice, where there are rapid changes of the resident staff, it is hard to have a technique carried out at first until a series of precedents are handed down. But imperfectly as these methods have been carried out, they have given results that are not surpassed by any other, and are superior to most.

73 Bloor Street East.

Personals

Lieut. Dr. Kendall Bates, of 169 Bay Street, Toronto, left for the front with B Section, No. 2 Field Ambulance on Saturday, August 7th.

Lieut.-Col. Dr. Andrew R. Gordon returned to Toronto from Shorncliffe on sick leave on July 26th. Dr. Gordon suffered, as soon as he arrived in England, from a severe attack of duodenitis, and it was considered advisable by his physicians that he should return home on three months' leave.

Lieut.-Col. Dr. Herbert A. Bruce left Toronto to join the Royal Army Medical Corps on July 24th. He expects to remain away all summer, but will return to Toronto in the early autumn.

Dr. Bruce has, since his arrival in England, been attached to the Duchess of Connaught's Hospital at Cliveden, and it is understood that he will proceed to France and spend the next few weeks between the different Canadian hospitals in France and Flanders.

Dr. R. A. Pyne, Minister of Education for Ontario, who spent several weeks in London during July and August consulting the War Office in reference to the proposed Ontario Base Hospital, was, ere leaving, gazetted Lieutenant-Colonel of the Royal Army Medical Service, and Honorary Colonel of the Canadian Militia.

Professor Irving H. Cameron, Consulting Surgeon to Toronto General Hospital, was a few weeks ago gazetted Lieutenant-Colonel of the Army Medical Service. As announced in our last issue, he left Toronto in July to take a post in one

of the large London hospitals, but we understand that the position had, unfortunately, to be filled before his arrival. Professor Cameron expects to return to the city this month.

Lieutenant D. E. Staunton Wishart, son of Dr. D. J. Gibb Wishart, of Toronto, has been granted a commission in the Royal Army Medical Corps.

No. 3 Stationary Hospital (Col. Casgrain, Windsor, Ont.), in addition to No. 5 Stationary Hospital (Queen's University, Kingston) was last month ordered to the Dardanelles. No. 4 Stationary, French-Canadian (Col. Migneault), has gone on to France to take the place of one of the hospitals at the front forwarded also to the Dardanelles.

Colonel Hodgetts, Red Cross Commissioner, returned during August from a twelve days' tour of inspection in France, during which he visited the Canadian Field Ambulances, Stationary Clearing Hospitals and Red Cross Store Depots. He made arrangements in Paris whereby he can efficiently distribute supplies from depots there to needy French hospitals. Colonel Hodgetts travelled about one thousand miles, and says that all medical officers are well and that there are plenty of vacant beds.

Major H. H. Burnham, son of Dr. George Burnham, of Toronto, has been mentioned for distinguished conduct. He left Valcartier as captain, being then connected with the medical staff of the 2nd Brigade, Canadian Field Artillery. Dr. Burnham's other son, Sidney Burnham, is now at Sandling camp, England, with the 19th Battalion.

News of the Month

AN EASTERN VISITOR

We had the pleasure of having call upon us last month Dr. Ah Mae Wong, of Shanghai, China. Dr. Wong recently spent a few months in Canada and the United States, visiting some of her old haunts. Dr. Wong graduated from the Women's Medical College, Toronto, in 1906, since which date she has practised medicine in her native city, with a considerable degree of success. The Doctor speaks English with exceeding fluency, and gave us a most interesting account of her work in the far East. She returned to China this month.

A MODERNLY EQUIPPED OPERATING ROOM

Surgeons who prefer to send their cases to a private hospital should bear in mind that the operating room, at the Lynhurst Hospital, 100 Yorkville Avenue, Toronto, has been recently re-equipped and is to-day one of the most modern in the Province. The surgeon will find there everything necessary for the most intricate case, the room being in charge of one of the most competent of graduate nurses. The Lynhurst to-day enjoys the confidence of a large proportion of the Toronto profession.

The Physician's Library

Encyclopaedia Medica. Second edition under the general editorship of J. W. Ballantyne, M.D., C.M., F.R.C.P.E., Vol. 1, Abattoirs to Asphyxia. Edinburgh and London: W. Green & Sons, Limited. 1915.

We had the pleasure of reviewing the first edition of this splendid work, and therefore hail with delight edition number two, just to hand. It must be a source of considerable gratification to the publishers, Messrs. Green & Sons, of Edinburgh, that a revised edition should be called for so soon, and we congratulate Dr. Ballantyne upon the reception accorded his labors. There is no material change in the general arrangement of the work. This was a wise decision, enabling readers very easily to find an article, owing to the alphabetical order. A large number of new headings are noticeable under, not only medicine, but surgery and new drugs as well. The volume has been revised throughout, many articles practically rewritten, this being necessary on account of recent advances in all branches of medical science. The anatomical nomenclature has not been altered—volume one covers all subjects between *abattoirs* to *asphyxia.*

Pollyanna Grows Up. The second Glad Book. By Eleanor H. Porter, author of "Pollyanna; the Glad Book." Illustrated by H. Weston Taylor. Boston: The Page Company. 1915.

It was with pleasure that we received from the publishers "The Second Glad Book." As we took occasion to say when referring to this book's predecessor, its philosophy is the very kind to cheer up a convalescing patient and we opine that a

physician cannot give a better prescription than a copy of Miss Porter's latest success. W.A.Y.

The Commoner Diseases—Their Causes and Effects. By Dr. Leonhard Jores, Professor der Allgemeinen Pathologie und Pathologischen Anatomie an der Universitat Marburg. Authorized English translation by William H. Woglom, M.D., Assistant Professor in Columbia University, assigned to Cancer Research; Assistant Pathologist to St. Luke's Hospital, New York City. With 250 figures in the text. Philadelphia and London: J. B. Lippincott Company.

Among the first features that attract the reader in this book are the half-tone plates. They are exceedingly good, some most delicately tinted, but at the same time just what we would expect of the Lippincott firm. The author deals in the text with "The Commoner Diseases," as he styles them, including the anemias, leukemia, endocarditis, arteriosclerosis, labor, pneumonia, diphtheria, typhoid fever, etc. Each article is complete in itself and has the advantage of giving in digested form the particular disease under consideration, its cause and effect. We admired exceedingly such illustrations as the section of small intestine from a case of typhoid, showing Peyer's patches (Fig. 92); pseudomembranous inflammation of the pharynx (Fig. 88); syphilitic scars in pharynx (Fig. 146); pulmonary tuberculosis (Fig. 107); arteriosclerosis of the pulmonary artery, colored (Fig. 43); and dissecting aneurysm (Fig. 69).

Guiding Principles in Surgical Practice. By Frederick Emil Neef, M.S., M.D. Surgery Publishing Co., New York.

In this little book of one hundred and sixty pages, the writer reviews the management of surgical cases from the time that operation is decided upon until the patient is discharged. The material is very practical, evidently the result of much reflection upon a full clinical experience. It consists of an outline of general principles and their practical application and is

most complete and instructive. It would be difficult to find a work containing all the essentials of the technique of preparation of the patient, the equipment of the operating room, the performing of the operation, the duties of the assistants and nurses, the post-operative treatment, etc., in a more concise and readable form. The book can be highly recommended to all doing surgical practice, but particularly to the general practitioner, senior students and hospital internes.

Anoci-Association. By Geo. W. Crile, M.D., Professor of Surgery, School of Medicine, Western Reserve University, Visiting Surgeon to the Lakeside Hospital, Cleveland; and William E. Lower, M.D., Associate Professor of Genito-Urinary Surgery, School of Medicine, Western Reserve University, Associate Surgeon to the Lakeside Hospital Cleveland. Edited by Amy F. Rowland. Original illustrations. Philadelphia and London: W. B. Saunders Co. 1914.

This very excellent book, setting forth the author's methods in the treatment of shock, is as practicable and logical as it is readable. The choice of words is a departure from the ordinary text-book style and the verbal illustrations are very graphic. It takes up all phases of shock, touching lightly on the side of theory to explain the "Kinetic Theory," and using as its base the accumulation of facts, histological, clinical, operative and experimental, and leaving no doubt in the reader's mind as to its efficacy. The authors have for their fundamental principle the elimination of every source of disturbance to the patient during the operation, as well as before and after, and to this end the methods of "blocking" the tissues with novocaine and quinine and urea hydrochloride, to prevent peripheral stimuli from reaching the brain, is elaborately and accurately defined. The "blocking" for each of the more important operations is described in detail and many valuable aids to the success and neatness of the operation are included. The method of inhalation anesthesia, used in conjunction with the blocking

methods, aims at as narrow a departure as possible from the natural processes of respiration and explains the uses and advantages of nitrous-oxide-oxygen. Through the book is an inspiring note, calling for the exercise of neat, precise and delicate surgery. The book may be used as a text for the routine carrying out of the methods, and comes not prematurely, but ripe and ready for reference.

State Registration for Nurses. By Louis Croft Boyd, R.N., Graduate of the Training School for Nurses of the City and County Hospital, Denver, Colorado. Second edition, enlarged. Octavo volume of 149 pages. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $1.25 net. Sole Canadian Agency, The J. F. Hartz Co., Ltd., Toronto.

This work represents a vast amount of labor and patient research, since it collects the full text of all the laws governing registration of nurses, in all the states of the Union, as well as the terms on which a nurse's license may be revoked, the requirements for application for license, and every other conceivable feature relating to the legal status of a nurse. It presents, therefore, in accurate concise form, every fact that a nursing organization needs to look up, in taking the steps preceding registration. It should be in the reference library of every nurse training school, and will be of great value to every superintendent engaging nurses for her staff, or to any registrar to whom strangers apply for the privilege of getting calls for private duty.

Abdominal Surgery. Clinical lectures for Students and Physicians. By Thorkild Roosing, Professor of Clinical Surgery at the University of Copenhagen. Edited by Paul Monroe Pilcher, A.M., M.D., Brooklyn, New York. Published by J. B. Lippincott Company, Philadelphia and London.

This book of 471 pages, with 136 illustrations and 9 plates, 7 of which being X-ray, is admirably adapted to the subject

sought, namely, clinical teaching in book form. A course of lectures on cases occurring in living subjects, all being demonstrated by operative work so cleverly that one receives the benefit as though having been directly under the supervision of this master surgeon.

Two lectures on general and local anesthesia are noteworthy. Diseases of the stomach occupy the major portion of the book, and with the technic of the operations of gastroentorostomy and for gastroptosis the profession will readily admit the author's marked ability as a surgeon and as a teacher.

C. F. M.

Diagnostic and Therapeutic Technic. A Manual of Practical Procedures Employed in Diagnosis and Treatment. By Albert S. Morrow, M.D., Clinical Professor of Surgery, New York Polyclinic. Second edition, thoroughly revised. Octavo of 834 pages, with 860 illustrations. 1915. (Morrow.) Cloth, $5.00 net; half morocco, $6.50 net. W. B. Saunders Company, Philadelphia and London. Sole Canadian Agents, The J. F. Hartz Co., Ltd., Toronto.

This is a most comprehensive work and one that reflects credit on its author. It is divided into twenty-two chapters, covering, in all, nearly 850 pages. Some idea of the field covered by the volume may be gained by stating that the following subjects are included in its contents: The Administration of General Anesthetics, Local Anesthesia, Sphygmomanometry, Transfusion of Blood, Infusions of Physiological Salt Solution, Treatment of Neuralgia by Injections, Exploratory Punctures, Aspirations, with chapters devoted to The Ear, The Larynx and Trachea, The Stomach, The Bladder, The Kidneys and Ureters, and The Female Generative Organs.

If there is one branch of medicine on which too much cannot be written (and this cannot be said of medical literature as a whole), it is Diagnosis. Every one of us knows that it is quite possible (and only too frequent) to be a good physician in theory, but a wretched diagnostician. Dr. Morrow has succeeded in his "Diagnostic and Therapeutic Technic" in giv-

ing the profession a volume that deals with every-day procedure in a thoroughly practical manner, for which reason alone his book will at once appeal to the average practitioner of medicine, containing, as it does, a great deal of material on subjects with which he is brought into active touch every day. We bespeak for the volume the support of the profession.

Manual of Obstetrics. By Edward P. Davis, Professor of Obstetrics at Jefferson Medical College, Philadelphia. 12mo. of 463 pages, 171 illustrations. W. B. Saunders Company. 1914. Canadian Agents: The J. F. Hartz Company, Toronto.

This book does not fill a much needed place to-day. It covers the subject but in a very meagre manner. The illustrations do not lend greatly to the value of the book. The subject matter is offered in a clear manner, however, and shows the mark of the practical obstetrician. The book is well bound and well printed, but obstetrics as a subject has increased so tremendously in breadth that it cannot be successfully set forth in such a small volume.

A Text-Book of Diseases of the Nose and Throat. By D. Braden Kyle, A.M., M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia. Fifth edition, thoroughly revised and enlarged. Octavo of 856 pages with 272 illustrations, 27 of them in colors. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $4.50 net. Canadian Agents: The J. F. Hartz Company, Toronto.

This valuable work on diseases of the nose and throat has rapidly reached its fifth edition, and this testifies to its favorable acceptance by the specialist and the general practitioner in America. The new volume has undergone a thorough revision. Ten new articles have been added, and in most respects, the advancements, in treatment and diagnosis, which come so

rapidly in this branch of medicine, are recorded and criticized. The book is well printed, the arrangement clear, and each subject is fully covered, and yet at the same time not overloaded with quotations from other works. One feels that the author is giving us his own experience, and this, after all, is the most valuable asset in any text-book. Dr. Brayden Kyle has had an extensive opportunity to observe the various conditions which he has described, and this new volume will be welcomed by the profession.

The Practice of Pediatrics. By Charles Gilmore Kirby, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Octavo of 875 pages, 139 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, $6.00 net; half morocco, $7.50 net. Sole Canadian Agents, The J. F. Hartz Co., Ltd, Toronto.

This book deals fully with children's diseases. The author does not enter exhaustively into the work as though it were an encyclopedia, but gives, in nice English, a full citation of all phases of each disease of the child, in such a manner that one's interest is maintained throughout.

It is the best work on the subject to date, and must create a marked demand. C. F. M.

The Practice of Surgery. By James Gregory Mumford, M.D., Lecturer on Surgery, in Harvard University, Surgeon to Clifton Springs (N.Y.) Hospital, Fellow of the American Surgical Association. Second edition, thoroughly revised, with 683 illustrations. Philadelphia and London: W. B. Saunders & Company. 1914.

As this book is gotten up to meet the requirements of the general surgeon, it presents the subjects in their order of frequency and importance and does not obscure the picture for the reader, by attempting to follow along special lines. It is divided into major and minor surgery and so serves the pur-

pose of two books. It is primarily clinical and operative and no space is given to the principles and technique of surgery. Commencing with the abdomen, abundant new material is introduced and there is an excellent chapter on the stomach. Peritonitis is well dealt with, but no new elements are here added. The author deals, in order, with gynecology, genito-urinary, the chest, face and neck, head and spine. The section on Minor Surgery takes up wounds, shock, blood vessels, lymphatics, muscles, tendons, bursae and skin, tumors, fractures, and dislocations, bones and joints, and amputations. The book touches very lightly on the older methods of surgery, which are little in use. An up-to-date chapter on fractures and dislocations draws on the works of Scudder and Stimson. The author has succeeded in presenting the conditions in a vivid and clear-cut manner and exactly as they are found, overlapping and rarely appearing as distinctive entities. The book is profusely illustrated, by original and recent drawings, and makes splendid and easy reading.

A Reference Handbook of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine and Allied Sciences. By various writers. Third edition, completely revised and rewritten. Edited by THOMAS LATHROP STEDMAN, A.M., M.D. Complete in eight imperial quarto volumes. Volume V, 929 double column pages, illustrated by 733 engravings and six full-page plates in black and colors. Wm. Wood & Co., New York.

We were pleasantly disappointed to receive so promptly volume Five of this splendid work. Judging from its size, it presents quite a formidable appearance, and after looking through its contents it is a veritable encyclopedia. It contains well over 900 double column pages and nearly 500 separate articles. The book is fully illustrated, giving the reader about 700 cuts and six full-page plates in black and colors. The subjects include those from "Head, Wounds of" to "Life Insurance Medicine." It is but 31 years since the first edition of The Hand Book appeared, but during that time it has steadily

improved, till to-day it is considered one of the best works of reference in print. We were glad to see the names of Drs. G. E. Armstrong, H. S. Birkett, A. D. Blackader, F. G. Finley, W. S. Morrow, all of Montreal; A. J. Nicholls, of Halifax, and Beaumont Small, of Ottawa, on the list of contributors.

Pathological Technique, including Directions for the Performance of Autopsies and for Clinical Diagnosis by Laboratory Methods. By F. B. Mallory, M.D., Associate Professor of Pathology, Harvard Medical School; and J. H. Wright, M.D., Pathologist to the Massachusetts General Hospital. Sixth edition, revised and enlarged. Octavo of 536 pages, with 174 illustrations. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, $3.00.

Dr. Mallory's work will hardly interest the average practitioner of medicine, as it is devoted almost entirely to Pathological Chemistry. The 6th edition contains many additions over the material composing its predecessor and is essentially up to date.

Manual of Operative Surgery. By John Fairbairn Binnie, A.M., C.M. (Aberdeen). Sixth edition, revised and enlarged, with 1,438 illustrations, a number of which are printed in colors. Philadelphia: P. Blakiston's Son & Co., 1912 Walnut Street. 1913.

No library is complete without this work of Binnie on extraordinary surgery. It is intended for the surgeon in difficulty, taking only the operations for rare conditions which are not included in the ordinary works on surgery, and cannot be used as a text-book on operative surgery on this account. It is pre-eminently up-to-date and the numerous illustrations are original and instructive. This is especially so with reference to those illustrating the chapters on plastic surgery and bone operations. Special attention has been paid to the lymphatics

of the gastro-intestinal tract, a part of surgery which is daily receiving more attention. The book is well classified and the operations are taken up clearly in "steps." It combines all phases of extraordinary surgery, major, minor, and emergency.

Operative Surgery for Students and Practitioners. By John J. McGrath, M.D., Clinical Professor of Surgery, Fordham University, Consulting Surgeon to the People's Hospital, Visiting Surgeon to the Harlem and New York Foundling Hospitals, Fellow of the New York Academy of Medicine, Member of the American Medical Association. Fourth revised and enlarged edition, with 364 illustrations, including full-page color and half-tone. Philadelphia: F. A. Davis Co., publishers. 1913.

A more orthodox work than many of the recent texts on Operative Surgery, it at once impresses the reader with its accuracy and exactness. It inspires a review of the surgical anatomy relative to the different operations, by a presentation of the same at the beginning of the chapters. In the selection of individual operations, the author has chosen those which are best suited to accomplish the objects in view. The book may be used for reference by the general surgeon, but also by the specialist. This is especially so with reference to the chapters on the abdomen, head, and neck. They are indeed excellent. An attempt has been made to combine major, minor, and emergency operations. A rather long chapter deals with amputations. The author has not entered the field of gynecology. The book keeps pace with the advance in technique and abundant new material is introduced.

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Editorials

PRE-NATAL CARE

AMONG the wealthy, where the number of children is arbitrarily limited, but where it is the object of all efforts to produce a perfect child, the expectant mother places herself in the care of her future physician as soon as conception takes place, and religiously obeys his very detailed instructions till the birth of her child, and afterwards. Much of this could be done where people are not wealthy, with much more effect, since the lower one goes in the social scale the more robust the physique of children is. When a woman announces pregnancy, her physician has a duty to perform. Without soliciting more work of a remunerative nature, he can outline her diet, exercise and methods of clothing herself, in a manner that the sensible middle-class woman will execute without waste of words or minutes. Many books have been written to show how far the mother can control the future of her child, by her temper and habits before his birth. Much has yet to be said,

much more to be learned. Some argue entirely for heredity, others put the responsibility on environment. It is hard to state when a child becomes his own master.

But taking it for granted that the mother has a large amount of the preparation of her child's soul to execute, yet there is a burden to be borne for her by someone else, her legal guardian, be she maid, wife or widow. She is not at her normal when pregnant, and she needs guidance and advice herself. Her husband or parents can get no better adviser than a thoughtful, earnest physician.

The habits of thought that will produce serenity and cheerfulness must be cultivated. Many times a mother is bearing a burden that she is sure she cannot provide for later, and that is sufficient to cause an anxiety that will lead to irregular eating, sleeplessness and other physical ills which all affect the growing child. We should encourage such a woman to talk, to get her woes out of her system, and to cast about for future provision for her troubles.

Friends can bring in plenty of literature, of the proper kind, not too exciting or strenuous, but mild, soothing, humorous stories, far from the morbid style too often prevalent among housewives. The witty tales of Birmingham, "The Search Party," "Spanish Gold," or "The Major's Niece," furnish a good example in point.

Habits of body would include the care of hair, teeth, nails, intestinal tract, kidneys, the sitting and standing postures, all the proper things that pro-

duce a feeling of neatness, or "well-dressed, well-groomed-ness," and attractiveness. A pregnant woman need not be slouchy. A little reproof or coaxing at the beginning brings her back to her old self-respect of her courtship days.

Not only do these things, carefully attended to, produce a sensation of extreme satisfaction, but they also affect the physiological relations of the mother to the child, in the elimination of waste, supply of fresh air, prevention of minor infections, and toning of the muscular system.

It is generally conceded that riding in automobiles is not conducive to a sedative effect on the nervous system. Driving can also be carried to excess, on account of the prolonged sitting posture, weakening the muscles through disuse that will be later required in the expulsion of the fetus. Of all games for the housewife at any time, and especially till far on in pregnancy, golf takes the lead. It is private. There is no team work. The costume is loose and light. The benefits from air and sun are incalculable. The hours are entirely within one's choice. One's companions are congenial. Some people have to get all their exercise doing their own housework, but they need make no moan over that. They belong to the class *par excellence* the healthiest, spared the worry or distrust of poor service. The only limitation on these duties is that of no reaching up, or climbing ungainly distances.

Work is itself a sedative. Means can be taken to save steps, and to conserve energy. The whole

family should exercise some self-denial in this respect by suppressing individual whims in order to give the mother the pleasure of still "doing" for them.

Rest comes regularly, in loose clothing, with the feet and limbs elevated, to expedite the venous flow and ward off varicosities, and in a quiet, airy room, absolutely alone.

Companionship is often a vexed problem. There must be a great deal, but of a limited type. This is not a time that family ties should be harped on or twisted to the breaking point. Everything of an annoying nature must be banished. Everyone who becomes an inmate of the household (for as short a time as possible, it is hoped) should bring good cheer and aid. Casual visitors are not of the prying variety, wanting to see the layette or the bassinette, but should express pleased surprise at their daintiness when voluntarily shown. A woman kept in a healthy frame of mind by these methods is not going to lose her poise at any great unexpected calamity.

Clothing is much simpler than what was designed for our grandmothers, who adopted the crinoline to disguise their condition. Now designers make a specialty of gowns, corsets, shoes, etc., for this purpose. The weight of gowns must come from the shoulder. There is no compression at the waist line. The corset is fitted around the hips, and hangs from the shoulder also, so as to make a floor for the pendulous abdomen to rest upon, besides giving at the hips a delightful snug "fitted" feeling that keeps

one's pride in tone. The suspender garters are banished. One wears socks, with man's Boston garters attached, covered with white ribbon and pink rosebuds if you like. But there must be no pulling down of the corset, and no round garters to cut off the much-required venous circulation.

Shoes with wide heels, set far back like a man's, but moderately high, afford great comfort and support. If they are not too high, the front of the foot will neither spread nor develop unsightly deformities.

These material things are widely advertised nowadays, since much of the early Victorian mock modesty has disappeared.

The child whose approach has been awaited in serenity and healthful comfort has been aided as far as human power can. What remains that is imperfect is only a part of Nature's great system, which produces irregularities here and there that cannot be accounted for and yet are not always to be bewailed.

The class of people who furnish the basis of city dispensary service are easily approached by the district nurses, under the Board of Health and its organizations, called locally by various names, Welfare Leagues, etc. The expectant mothers enroll themselves creditably early, and bring a specimen of urine, or report small ills, quite complacently. They like to get something for nothing. This class is carefully handled, from the standpoint of prophylaxis, for the sake of the community.

CANADA MEDICAL ACT

THE Medical Council of Canada sent out its third annual announcement on July 1st, 1915, relating, as the cover reads, to registration under the Canada Medical Act, examination for the license of the Medical Council of Canada, and the Canada Medical Register. It is printed, as one would naturally expect, in Ottawa, the home of all Federal business, but in no respect does it discriminate unfairly among the provinces. It names the officers of the Council, their solicitor, bankers and auditor, the laymen being citizens of Ottawa, but the physicians hailing from Montreal, Sault Ste. Marie, Halifax and Ottawa, as becomes the age of the provinces, their wealth of experience and the preponderance of population. Following this stands the list of members of the Council, consisting of five members from Ontario, six from Quebec, three from British Columbia, three from Nova Scotia, two from New Brunswick, two from Prince Edward Island, three from Manitoba, three from Alberta, and two from Saskatchewan, closing the list of allopaths. To these are added three representatives of homeopathy from the older provinces, making thirty-two in all. They are classified not only as representatives of provinces but also the eight great medical schools of allopathy in the Dominion. Besides the usual committees necessary for any organization, the bodies which show the special nature of their work are the Committees on

Education, Rules, Discipline, and Educational Standards.

Examinations are to be held in Montreal and Halifax, October 12th, 1915, four men handling each of seven subjects, and again in Toronto and Winnipeg, June 13th, 1916, only two men, however, being assigned to each subject.

The address of President Thornton, of Deloraine, Man., touched on the incidents of the past year, the knighting of the Honorary President, Sir T. G. Roddick, the report of the committee on co-ordinating the curriculum of all medical schools, the outbreak of the war, which has so profoundly altered the whole aspect of every situation, particularly their own, the gratifying number of applicants for the L.M.C.C., and the rapid "stepping-up" of the reciprocal relations between British and Colonial Medical Councils, due to the number and superiority of the physicians volunteering here for service at the front.

The Registrar reported that in the October, 1914, examinations, 86 men wrote, of whom 12 came for supplementals of the preceding year. Of these 86, 49 were successful, and 15 were starred, while 22 were rejected. It has always been a patent fact that "the Council was stiff" to the raw graduate, even when it was only provincial, and by co-ordinating the curriculum and unitedly exerting a controlling influence over the whole group of schools without making fish of one and flesh of another, it is to be

hoped that the weeding out will not be left to the Council, but happen in the second year at the latest. It looks bad for any school to prolong the agony and accept fees from any man who cannot do his school credit at the end of his student career.

Of the 86 candidates, 5 resided in the United States, 1 in the West Indies, but outside the students of Canadian colleges, only 2 presented themselves. The subjects flooring most of the applicants were physiology and medicine, 23 being plucked in each. These papers were, one might say in passing, very fair and simple, each giving a man a chance to open up and tell what he knew, without any catches whatsoever, showing where in his practice he might combine his clinical sense with his laboratory tests to make an absolutely correct diagnosis. It is, however, manifestly difficult to compare the standards of any two students, times, places, countries, or examiners. Nay, more than that! One examiner will not give a paper the same valuation at any two periods. It is not wise to draw conclusions too sharply on this point.

The Registrar pointed with pride to the Federal grant of $15,000 for furthering the aims of the Council. He also begged that physicians should come forward and take advantage of the special clauses enabling them to register, simply on payment of the fee, without examination, even though no direct personal gain might accrue. The wonderful unity effected interprovincially by the new Act

would be the sooner realized in each community by the moral support lent by the oldest, most experienced and highly respected practitioners, who should fall in line on the general principles of progress.

In the list of names, therefore, one must vainly look in the Canada Medical Register as it stands today for some of the familiar names of our youth, of men who knew our families root and branch, or their famous colleagues who made one thrilling visit to operate on some neighbor's son, and of whom we who are perhaps nearer the swirling centre of the progressive movement would be most pleasantly reminded again.

Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., *must be* in our hands by the first of the month previous to publication.

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Original Contributions

HAEMORRHAGE INTO THE LATERAL VENTRICLE; RECOVERY

BY G. E. JURBEN LANNIN, M.D., HAMILTON, ONTARIO.

Elsie Bonniwell, 76 Mars Avenue, age ten, on Thursday, April twenty-ninth, while playing at school, patient accidentally collided with a playmate, both childrens' heads striking and then both falling to the ground. The other child escaped unhurt, but patient complained of some pain in her head, but mostly in her stomach and left side. On examination three-quarters of an hour after the accident, I found patient in the following condition: Pulse normal, seventy-two, full volume and tension, pupils equal, and reacting to light. Patient was in an excited mood with some pallor, some shock. She vomited slightly, and felt relieved. I then took her home in my auto, and she walked unsupported into her home and was put to bed to rest quietly. Her condition, as far as could be ascertained, was then normal, except that she complained of feeling a little soreness over the stomach and left side, which I attributed to shock. One and one-quarter hours later, she developed convulsions and became unconscious. Upon examination at that time I found her unconscious and having convulsions both tonic and clonic involving both arms and legs, though the left side seemed to be more spastic than the right. Both pupils were widely dilated and turned markedly to the right and set in this direction. The lower jaw was pulled to the left side of the face, showing a right facial paralysis. The pulse was slowed to about sixty and was hard and wiry. Respirations were irregular and varied with the convulsions, which recurred at intervals of about five to eight

minutes. I took the child to the hospital and had radiographs, lateral and from before backwards made, but these failed to show any fracture whatever. I decided that the lesion was probably hemorrhage upon the right side of the head, involving the frontal parietal region. By this time the child's general condition was rapidly becoming worse. The convulsions were increasing in rapidity and severity, the pulse was slow and irregu-



Elsie Bonniwell, one week after leaving hospital.

lar and the breathing stertorous. I decided to trephine on the right side in the temporal region in anticipation of a hemorrhage from the right middle meningeal artery. I opened the scalp with the usual semi-lunar incision in the temporal muscle and threw it back. I trephined the skull and enlarged the opening with Rongeur forceps. On opening the skull, there was marked

edema, bulging of the dura, and no blood clot in evidence. I then opened the dura and found only normal cerebro-spinal fluid with no evidence of any clot or rupture of the meningeal vessels. The brain tissue itself was dark and œdematous and bulging, the vessels of the arachnoid and brain itself were congested and dark. I searched carefully over the frontal and parietal lobes and downwards towards the base for any hemorrhage or lesion, but found none. I then passed an aspirating needle attached to a syringe, directly into the lateral ventricle and on withdrawing the piston drew up about 5C.C. of blood into the syringe. I was thoroughly satisfied that the source of the hemorrhage was from the central vessels of the cerebrum itself, and thus into the ventricle, and that recovery was hopeless. I then placed a small rubber tissue drain beneath the dura and closed it with catgut sutures, likewise closing the sheath of the temporal muscle and the scalp with silkworm gut. In the meantime, upon the relief of pressure the pulse had risen to one hundred and twelve, and the respirations to thirty-six. The patient came out of the anæsthetic in about six hours and regained consciousness completely in about twelve hours. She was given morphia, grain one-sixth. The pupils were equal and reacted to light and the movements of the hands, arms, and legs were normal. The facial paralysis on the right side was gone. The patient took fluids readily, but vomited a bile stain fluid for some hours following the anæsthetic as usual. The pulse dropped to sixty but was a full volume and tension, though occasionally irregular. I dressed the wound in eighteen hours, loosening the drain, and at the end of forty-eight hours removed the drain completely. There was marked bulging over the trephined area for the first week after which the bulging disappeared and was followed by retraction. The patient made an uninterrupted recovery and left the hospital on the twenty-second day. I wish to express my appreciation and thanks to Doctors Haist and Morgan for their able assistance with the case.

The only provisional explanation of the case that I can make is that the relief of pressure from the cerebrum allowed the centres to function, while coagulation and organization and absorption took place.

DISABILITIES,
Including Injuries Caused by Bullets, Shrapnel, High Explosives, &c., as Illustrated by Cases Examined before a Medical Board at Canadian Headquarters, Shorncliffe, England *

BY A. PRIMROSE, M.B., C.M., EDIN.,
Lieutenant-Colonel, No. 4 General Hospital (University of Toronto), Canadian Expeditionary Force.

The institution in military organization known as a Medical Board consists of three members, a president and two colleagues. Two such Boards were formed from the personnel of No. 4 General Hospital in June, 1915, and sat daily at Shorncliffe for some weeks. Their duties consisted in examining men who were or had been physically unfit either because of illness or from injuries received in action. The greater number of the cases examined in this particular instance were men who had either been wounded or had been the victims of gas-poisoning at the front and who had sufficiently recovered to be able to present themselves before such a Board for examination for the purpose of determining as to their physical condition. Men who had been rendered permanently unfit for further service by their injuries were recommended for discharge from the force. If it was found that the man was not permanently unfit, then we had to state if we considered him fit for home service or for "light duty." If a man were temporarily unfit for home service or light duty we were required to give our opinion as to the probable period which would elapse before he would be considered fit. In some instances a man might be quite unfit to go into action and yet be able to render valuable service in various positions in England, such as instructor, office-clerk, officer's servant, etc. For example, a man might be incapable of standing the strain of heavy marching, but would be quite equal to the task of work as clerk in an orderly room.

* Submitted to the Director of Medical Service, Canadian Contingents, and approved, August 23rd, 1915.

The number of cases which came under our observation in eight weeks was 819. In addition to injuries received in action there were disabilities the result of flat-foot, hernia, varicose veins, heart disease, pulmonary tuberculosis, epilepsy, etc. The following list of the 819 cases examined will give some idea of the type of disability we had to deal with in individual instances.

Classified List of Cases Examined by the Medical Boards.

Non-Traumatic Conditions.

Flat foot		43
Varicose veins of leg		17
Varicocele		9
Hemorrhoids		17
Hernia		23
Heart disease		40
Tuberculosis, in the lungs	24	
Elsewhere	10	
	—	34
Defective vision		23
Epilepsy		16
Gonorrheal arthritis		2
Alcoholism		4
Syphilis		3
Insanity		3
Goitre		4
Lateral curvature of spine		4
Exposure to wet and cold—		
"Frost-bite"		6
Rheumatism and sciatica		22
Lungs and pleura, affections of, other than tuberculosis		17
Gastritis, ulcer, etc.		6

Pyorrhea alveolaris		4
Malingering		1
General ill health due to a variety of causes, anemia, nephritis, etc.		16
		314
"Gas" poisoning—		
No second disability		43
With nerve exhaustion		17
With wound elsewhere		36
		96

Traumatic Conditions.

Traumatism due to accidents and *not* caused by bullets, shrapnel, etc.

Fracture of long bones		9
Sprains and dislocations—		
Knee	13	
Ankle	6	
Hand, wrist	9	
Other joints	9	
		37
Injuries to head, concussion and scalp wounds		4
Cellulitis of extremities		14
		64

Traumatic Effect of High Explosives.

Neurasthenia	61
Deafness	18
	79

Gunshot Wounds.

	Shrapnel.	Bullet.	Bullet or shrapnel, not specified.
Head—			
Skull, scalp, jaws.....	14	11	..
Loss of eye.....	..	4	22
Face	..	4	..
Neck	..	2	..
Upper extremity—			
Shoulders	6	7	..
Arm and forearm.....	6	30	..
Hand and wrist.....	10	17	..
Chest	2	6	..
Abdomen	4	2	..
Spine	3	4	..
Lower extremity—			
Hip	3	..	..
Thigh and leg.....	13	22	..
Knee	4	6	..
Foot	9	7	..
No locality given	20	18	..
General effects of shell fire..	10	..	..
	104	140	22
Total			266

Summary.

Non-traumatic conditions		314
Traumatic effects of high explosives.....	79	
Traumatism due to accidents and not caused by bullets, shrapnel, etc.	64	
"Gas" poisoning cases.....	96	
Gunshot wounds, bullets, shrapnel, etc.....	266	
		505
Grand total		819

It will be seen that the greater number were those of injuries received in action; of these a much larger number of injuries were received in some portion of the body above the waist than in the legs or abdomen. Unfortunately in the records which we have preserved the locality is not stated in all. These will be more carefully tabulated for statistical purposes when the records are finally disposed of in the statistical department of the War Office, but in the less detailed notes which have been kept here for our own purposes it is evident that injuries received in the trenches are more likely to be about the neck and upper extremities than elsewhere about the body. That is as one would expect, especially as our observations are necessarily restricted to cases of men who are not fatally injured and who have recovered sufficiently to be able to present themselves before a board.

We shall first speak of a class of disability which preexisted in minor degree at the time of enlistment and which had been aggravated by the conditions of active service, with the result that the man was rendered more or less permanently unfit for further physical strain.

1. Flat Foot.—This constituted by far the largest number in this series. In the vast majority of instances one found that men incapacitated by flat foot gave a history of trouble prior to enlistment. These men had the condition greatly exaggerated by heavy marching; they suffered pain and had frequently to drop out of the ranks when on route march. In many instances they were unable to stand without a considerable amount of pain. The condition varied in degree, sometimes being of a very exaggerated type, while at other times the arch was not entirely obliterated. One frequently hears the question discussed as to whether a man with marked valgus and free from pain should be permitted to enlist. In our present observations it is impossible to state the percentage of such cases which are able to continue their duties without discomfort, but unquestionably many of these men break down and become incapacitated. The conditions of active service are such as to increase the disability caused by flat foot. We would therefore argue that in recruiting such men should be rejected.

2. Varicose Veins of the Leg.—Here again experience shows that such conditions are much aggravated by active service. Comparing the disability with that of flat foot it would appear that a larger percentage of cases were unaware of the existence of varicosities on enlistment. There have been a number of instances where extensive recurrence has occurred after operation, and one is convinced that a sufficient time is not allowed to elapse after operation before the man is allowed to go on duty. Unquestionably at least three months should pass after removal of varicose veins before a man is allowed to undertake heavy marching.

3. Varicocele.—This condition does not produce anything like the degree of disability caused by flat foot or varicose veins of the leg, and it is much easier to obtain radical relief by operation than in the case of the other two conditions. The fact that we have had nine instances of disability from this cause, however, shows that it is important to have the condition rectified before enlistment.

4. Hemorrhoids.—What we have said regarding varicocele applies in all particulars to piles—the degree of disability is often extreme. Pain and hemorrhage are the chief complaints, and the man is rendered absolutely unfit when these symptoms are exaggerated.

5. Hernia.—As far as our experience goes no man was enlisted who was known to have a hernia at the time. Two classes of cases presented themselves: those who had developed a hernia for the first time in active service and those who suffered recurrence after operation. Men who have submitted to an operation are frequently allowed to undertake military duties far too soon. At least three months should elapse after radical cure before a man is permitted to undertake the strain of active service. Indeed it is a question whether such a man is fit for the strain of duties entailed upon him in the firing line even if a successful radical cure has been accomplished. Unquestionably men who have suffered a recurrence are permanently unfit for service at the front.

6. Heart Disease.—A number of heart cases have been examined. Some of these are recent and have undoubtedly

developed during active service, some men giving a history of rheumatism following exposure. Others dated their trouble to a period prior to enlistment. We were compelled to discharge a number who were obviously unfit, but occasionally the heart lesion had been discovered accidentally by the regimental medical officer in which there was perfect compensation. Such cases we considered should not be subjected to the strain of active service at the front, but were recommended for less arduous work.

7. *Tuberculosis.*—This was manifested in various lesions of lungs, glands and joints. Men on active service are necessarily exposed to wet and cold, and at times it may be impossible to obtain shelter from bad weather for hours or days together. Under these circumstances it is not surprising that there is a danger of pulmonary tuberculosis developing in those who are predisposed thereto. In a large percentage of the cases examined it was obvious that an active condition had been engrafted upon a healed lesion or the physical signs showed old quiescent lesion in one lung with acute trouble in the other. It is therefore obvious that the recruiting medical officer should be careful to refuse to pass men as physically fit who have a known predisposition to tuberculosis or who present evidence of having previously had tuberculosis of the lungs. We encountered very few cases of cervical tuberculous glands and a still smaller number of tuberculous joint disease, but in two instances an old healed lesion in the spine, with slight kyphosis in each case was found. The trouble had undoubtedly been quiescent for years but had apparently become active as a result of the exacting and strenuous life of active service.

(*To be continued.*)

Society Proceedings

THE CANADIAN PUBLIC HEALTH ASSOCIATION

This Association convened in Toronto on September 3rd and 4th, the meetings being held at the Academy of Medicine Buildings, 13 Queen's Park. The attendance was not large, but made up in quality what it may have lacked in numbers. The papers were of a high order, some being of exceptional interest.

The medical health officer as a social force loomed largely in the discussions. The housing problem, public charities, and medical inspection in the schools were all discussed in connection with the work of the health officers, and the Association by a unanimous vote went on record as favoring the transfer of control of medical inspection in the schools from the school board to the medical officer.

The second and closing day of the convention was unusually good. The morning was devoted almost entirely to the discussion of housing problems and town planning. Dr. P. H. Bryce, Chief Officer of Health for the Immigration Department, discussed the relation of land speculation to improper housing conditions, and criticized the present land laws in the Dominion, which legalized land gambling. Mr. G. Frank Beer, President of the Toronto Housing Commission, reviewed the experiment made in Toronto to provide modern housing accommodation for workers. Mr. Beer advocated the organization of labor exchanges as a means of counteracting overcrowded housing conditions. With such exchanges in operation the worker subject to periods of unemployment could live a distance out in the country and when unemployed, instead of wasting his time wandering around looking for work, could spend his time profitably on his land until the exchange notified him that there was employment awaiting him.

Professor S. M. Gunn, of Boston, discussed the relation of health to charitable work, and urged that public charities should be under the control of the local department of health. In a large number of cases the recipients of public charity were those living under conditions most inimical to health. Miss Eunice Dyke, in speaking of the work of the district nursing staff, explained the handling of tuberculosis cases and the system of notification. In this particular she laid stress upon the fact that many cases were reported by the nurses that should have been co-operating fully in fighting tuberculosis.

The Association will hold its next convention at Quebec, the invitation of the Mayor of Quebec having been accepted.

Dr. C. J. C. O. Hastings, of Toronto, was elected as President of the Association for the ensuing year, Dr. P. H. Bryce, of Ottawa, being chosen as Honorary President. Doctor Hutchinson was elected Vice-President, Dr. Geo. B. Porter, Treasurer, and Dr. O. C. J. Withrow, Secretary.

The following Provincial Vice-Presidents were elected: Ontario, Dr. F. A. Dallyn; Manitoba, Doctor Douglas; Saskatchewan, Doctor McMillan; Alberta, Doctor Revell; British Columbia, Doctor Underhill; Nova Scotia, Doctor Hall; New Brunswick, Doctor Warwick; Prince Edward Island, Doctor Johnston.

Before the convention adjourned a resolution was unanimously passed extending congratulations to the Right Honourable Sir Robert Borden on his safe return and warmest thanks for his able and philanthropic effort in establishing a hospital in France for the French, and for the assistance given by his Government in the fight against tuberculosis. The convention also voted its thanks to the University Laboratory for supplying serum to physicians at a low cost. The University department, under Doctor Fitzgerald, is also supplying tetanus antitoxin to the French Government.

The delegates ended the day at the Exhibition as guests of the C. N. E. Association.

Militia and Naval Medical Services and Ambulance

THE DISTRIBUTION OF THE CANADIAN MEDICAL SERVICES IN ENGLAND

By Capt. (Dr.) G. S. Strathy, Toronto, Ontario.

Moore Barracks, Shorncliffe.

In the Cecil Chambers on the Strand are the Headquarters Medical Services, Canadian, which controls all the Canadian medical units both in England and on the Continent. All newly-arrived medical units and medical officers report there and then are distributed as required.

Nearly all the medical officers from Canada who are in England are at the Shorncliffe Camp, and it is there that all wounded and sick men are sent before returning to duty.

A man wounded in France passes through various hospitals there and then, if fit to travel, is sent to England, where he may be sent to any one of several hundred hospitals and convalescent homes. When he is fit to return to his unit he is sent down to Shorncliffe, and if still unfit for duty, he is sent to Moore Barracks Hospital either to be treated or examined by a medical board and discharged from the service as permanently unfit.

Each combatant unit in England has a regimental medical officer who sees all the men in his battalion or brigade reporting sick. If the ailment is a minor one not rendering the man unfit for duty the regimental medical officer treats him. If his ailment is slight and he is likely to be fit in a day or two, he is sent to the brigade hospital, which is usually under the care of an officer of a field ambulance. These brigade hospitals are in tents

and the patients lie on stretchers. If the ailment is more severe a man is sent to Moore Barracks Hospital, which is the head-quarters hospital.

At Moore Barracks the patients are kept under observation and treated, or maybe distributed to other hospitals, as is thought advisable. All the sick thus pass through this hospital. Here most of the patients are retained until fit to rejoin or to be sent to a convalescent home.

Moore Barracks Hospital at present has about 550 beds. The old barracks and the married men's quarters have been



Ward 14, Moore Barracks, Canadian Hosiptal.

turned into wards. The buildings are gradually, a few at a time, having the old furnishings pulled out and bath-rooms, lavatories and pantries are being put in, so that soon they will have all the requirements of up-to-date hospital wards. The operating and X-ray rooms are not yet finished, and cases requiring X-rays or operations are sent to the Shorncliffe Military Hospital about a quarter of a mile distant. The barracks are beautifully situated on the top of the cliffs overlooking the Channel, so that convalescent patients are able to sit out on the

grass and enjoy the view. The view is one of which one never grows tired. Vessels of every description can be seen as they pass from the entrance of the Channel at Dover to the lighthouse at Dungeness. There are often several hundred ships in view



In the gardens at Queen's Canadian Hospital, Beachborough.

at one time—large liners, cross-channel packets, freighters, mine sweepers and fishing boats. Frequently are seen the ever-watchful destroyers, like sheepdogs among a flock, rounding up strange vessels and keeping an eye on their flock to warn them of danger. Submarines, too, are often to be seen, either awash or

with just their periscopes in view, going through manoeuvres which are a great source of interest, although no one on shore knows what these manoeuvres are for.



Canadian Ambulances at Shorncliffe Military Hospital.

Half-way down the cliffs, and beautifully situated amongst the trees, is the Shorncliffe Military Hospital, a permanent hospital, until recently under the control of the Royal Army Medi-

cal Corps, but now manned by No. 4 General Hospital, Canadians (the Toronto University Hospital). To it are sent all operation cases and many overflow cases, both medical and surgical.

Infectious cases are sent to the civil Fever Hospital at Folkestone, about two miles away.

The next line of hospitals are the V. A. D., or Voluntary Aid Detachments. They are all under the control of the Assistant Director of Medical Services, Canadians, Shorncliffe. These institutions are houses or institutional buildings turned into hospitals with civilian practitioners and volunteer nurses. They receive overflow cases and some cases direct from France or Belgium. The largest of the V. A. D. Hospitals is the Bevan Home, at the foot of the cliffs and within a few yards of the sea. In these, too, is included Queen Mary's Canadian Hospital, Beachborough. Beachborough is the country seat of Sir Arthur Markham, M.P., and is beautifully situated in the South Downs, about two miles from the sea. Sir William Osler is the consulting physician and Lieut.-Col. Donald Armour the surgeon-in-chief. All the nurses at this hospital are Canadians, most of them from Ontario. Lady Markham is the superintendent.

The Convalescent cases from the Moore Barracks, Shorncliffe and V. A. D. Hospitals are sent to Monks Horton Convalescent Home. This is a beautiful country estate about seven miles from Shorncliffe, manned by C.A.M.C. officers and men. Here the patients stay in beautiful surroundings, living in large tents until they are fit to rejoin their units.

Special hospitals for organic nervous diseases and nerve injuries, chronic joint cases and eye, ear, nose and throat cases are being established.

A tent hospital of about 200 beds for venereal cases is at St. Martin's Plain, a mile from Moore Barracks. Until the present this hospital has been under the care of No. 5 Stationary Hospital, the Queen's University Hospital.

An account of the various problems arising from the military nature of the service and a description of the cases, I must leave for my next letter.

CAPTAIN DOCTOR ALFRED HAYWOOD

Captain Dr. Alfred Haywood, of the New Toronto General Hospital, who received the military cross in recognition of his work in France and Belgium, is again at home. He underwent an operation for appendicitis and has been invalided for six weeks. Letters received in the city speak highly of the bravery and sterling qualities of Doctor Haywood, who, although attacked with illness at Salisbury, insisted on accompanying the troops to France. There he was again attacked, but in spite of fatiguing work, never gave in. After the battle of St. Julien he attended to a large number of wounded men, and although in an extremely bad condition himself, was on his feet for fifty-four hours at a stretch. He lost fourteen of his stretcher-bearers, and his dressing station was shelled. At Festubert his dressing station was shelled a second time and three wounded men whom he was attending, and one of his assistants, were killed.

PROVISIONAL OFFICERS' TRAINING SCHOOL

The following doctors recently received instruction at the Provisional School for Medical Officers at Niagara Camp: Cleeland, F. A., Toronto; Phillips, P. W., Toronto; Campbell, J. A. M., Waubaushene; Ross, F. A., Barrie; Lewis, W. A., Barrie; McCormack, V. W., Toronto; Kilgour, D. Mc., Toronto; Bailey, G. T., Cochrane; Kirby, W. J., Englehart; Harvie, H. H., Coldwater; Armitage, H. W., Brampton; Young, C. R., Toronto; Baker, D. M., White River; Russell, J. P., Timmins; Matthews, F. J., Brooklyn, N.Y.; Carleton, G. W., Toronto; Thompson, F. G., Toronto; Hall, H. C., Toronto; Matthews, B. P., Toronto; Wallbridge, F. G., Midland; Robb, W. M., Toronto; Rogers, H. P., Toronto; Laughland, L. C., Dundas; Rogers, S. O., Toronto; McLean, J. R., Sault Ste. Marie; Gourlay, T. A., Cayuga; McKenzie, W. W., Hamilton; Mabee, W. J.; Wilson, M., London; Graham, J., Toronto; Currie, D. V., Merritton.

Personals

Doctor MacKendrick, of Galt, Ont., left for France on August 20th. Ere leaving he was presented with a wrist watch by his friends of Waterloo County at the Galt County Club.

Lieut.-Col. Herbert A. Bruce, A.M.C., of Toronto, who was ordered to France the latter part of August, is now attached to No. 2 Canadian Hospital at Le Treport. It is understood that Lieut.-Col. Bruce will go later to Etaples. While in England he was at the Duchess of Connaught's Hospital at Cliveden and at Shorncliffe.

Dr. James Henderson, of Regina, son of Mr. James Henderson, 34 Brunswick Avenue, has gone to England to accept a commission in the Royal Army Medical Corps.

The Trustees of the American Medicine Gold Medal awarded the medal for 1915 upon Dr. Rupert Blue, Surgeon-General U. S. Public Health Service, as the American physician who in their judgment has performed the most conspicuous and noteworthy service in the domain of medicine and surgery during the past year.

News of the Month

THE ONTARIO BASE HOSPITAL

After looking over several sites for the Ontario Government Hospital, Colonel Doctor Pyne has, we understand, chosen Orpington, in Kent, distant from London fifteen miles, and a short distance from Dover and Folkstone. The hospital will contain 1,040 beds. Half may be used for convalescent patients and those suffering from shock and half for acute cases, or all for acute cases, depending on the necessity that may arise. The hospital is now under way and will be completed without delay.

A MODERNLY EQUIPPED OPERATING ROOM

Surgeons who prefer to send their cases to a private hospital should bear in mind that the operating room, at the Lynhurst Hospital, 100 Yorkville Avenue, Toronto, has been recently re-equipped and is to-day one of the mose modern in the Province. The surgeon will find there everything necessary for the most intricate case, the room being in charge of one of the most competent of graduate nurses. The Lynhurst to-day enjoys the confidence of a large proportion of the Toronto profession.

DEATH OF DOCTOR W. R. HALL, CHATHAM, ONT.

The profession regretted exceedingly to learn that Dr. W. R. Hall, ex-President of the Medical Health Officers' Association, died at his home on August 22nd. Doctor Hall presided at the Peterborough meeting of the Ontario Health Officers' Association, and for many years has been Health Officer for the City of Chatham. Doctor Hall was born in Whitby Township in 1852.

The Physician's Library

Essentials of Laboratory Diagnosis. By Faught. Fifth edition. Philadelphia: F. A. Davis Co.

This is "a concise and compact laboratory manual," with the merits and some of the faults of the manual. It is an elaborate index of "tested methods," and as such is of value both to the student and the practitioner. In such a book there is no room for the personal touch or the inspiring suggestion, while on the other hand the conclusions are indecisive or frankly dogmatic. The space devoted to the various subjects depends more upon recent activities along certain lines than upon the relative importance of the subjects. The section on bacteriology is woefully deficient, not only in space but in treatment.

The methods and formulæ are accurate, and as a rule the directions are clear and concise. W. G.

Bram of the Five Corners. By Arnold Mulder. Chicago: A. C. McClurg Co. $1.25.

There are not a few books where a character more or less mentally defective appears on the stage of the story, but, with the possible exception of "Marm Elsa," by Kate Douglas Wiggin, and perhaps "Barnaby Rudge," there are none where one of the three leading characters is definitely feeble-minded and where the history and nature of mental defect is closely interwoven with the plot and is, indeed, the main theme of the story. The scene is laid in rural Michigan, among the Dutch or Hollanders, who are represented as so ignorant, narrow-minded and

unprogressive that the reader wonders if the settlement described is a typical one or if it is, on the contrary, exceptional in respect to the character of the people living there. The skill of the author is rather that of the journalist than of the novelist, but the interest in the story is usually well sustained and there are passages of remarkable strength, notably when the family doctor, with knowledge born of experience and modern professional training, shows to the young man the real meaning of the character and conduct of his intended and of her father, who were both mental defectives, and accounts for the sad fate of his own uncle in being the father of a mentally defective son and the husband of one from whom that mental defect was inherited.

The book is a sign of the times and will be read with keen interest by those concerned about social problems. Perhaps the most attractive character in the book is the Dominie, who was as progressive as his people were unprogressive and as much inclined to be kind as they were to be harsh.

The Extra Pharmacopeia (Martindale).

The profession will be interested to know that the sixteenth edition of this book has recently been issued and is now ready for delivery by Mr. W. Lloyd Wood, Toronto.

It is two-and-a-half years since the fifteenth edition of this work was published. During the period which has elapsed the authors have used their utmost endeavors to render this new edition worthy of the success of previous issues.

The sixteenth edition of the "Extra Pharmacopeia" is in two volumes, as on the last occasion.

Volume I retains the general characteristics of the last edition, including, besides extra pharmacopeial chemicals, drugs and materia medica—manufacture, dose and methods of administration, etc.—such subjects as vaccine therapy (much enlarged), organotherapy, therapeutic index, also the general index to the complete work (about 12,500 headings).

Volume II deals mainly with matters analytical, experimental, bacteriological, etc. It is not a supplement merely, but completes the work.

The price of the two volumes is $5.20. Separately, Volume I is $3.50 and Volume II is $1.75, postpaid.

A Text Book for First Year Pupil Nurses. By Charlotte A. Aikens, Detroit. Published by W. B. Saunders Co., Philadelphia and London.

Miss Aikens is a woman of whom all Canadians should be proud. Formerly superintendent of Columbia Hospital, Pittsburgh, and of Iowa Methodist Hospital, Des Moines, then director of Sibley Memorial Hospital, Washington, D.C., she has lived through every phase of hospital administration. She has learned to set a high value on the practical needs of hospitals, to get into close touch with patients, rich and poor and middling poor, and to understand the difficulties of pupil nurses.

Anything from her pen is interesting, useful and exhaustive, whether it be on hospital office work, housekeeping or nursing. Of these works there are several, and the proof of their usefulness is the fact that they go rapidly into second and third editions, as for example the Primary Studies. Miss Aikens has many other interests in which she is actively engaged, all of which combine to give her such wonderful breadth and humanity of aim.

"Primary Studies" contains all that is necessary for the pupil in her first year, and if the time ever comes when text books will be standardized in training schools, Miss Aikens' book should have first claim, since the possession of it would enable a pupil to face any first year problem. The subject matter is correct, and up-to-date, and presented in direct simple language.

The new points about the book are the questions appended to each chapter, the spaces set in for note-taking, and the addi-

tion of material in the sections on Anatomy, Bacteriology, Asepsis, and Materia Medica.

Reading the book through, one feels that it must carry with it the author's strong influence for whatever is industrious, humane, charitable and right.

Fewer and Better Babies, or The Limitation of Offspring, by the Prevention of Conception. By William J. Robinson, M.D., Chief, Department of Genito-Urinary Diseases and Dermatology, Bronx Hospital and Dispensary, New York. 1915. The Critic and Guide Co., New York City.

There are some physicians even who, through perhaps a little narrow-mindedness, will object to such a book as this, claiming that its views had better remain unexpressed—with those professional brethren, in this instance, we must take exception, as the writer has always maintained that there is prevalent altogether too much prudery and far too great a state of ignorance on the part of the public on the subject of sexual ethics. If there existed less of such ignorance, and parents would discreetly and judiciously and at the proper age instruct their children along such lines, showing them the pitfalls they must avoid, there would be far fewer of our young people go wrong and we, as parents, would not deserve to hear, as we do so often these days, from our children the cry, when it comes too late, "Why did you not tell me?" This volume tells a plain story and tells it well, though we admit that we do not concur in all of the author's views.

Mothercraft.

No department of social work has remained uninfluenced by the problems of the present war, and in every case, almost without exception, associations as well as individuals have risen to a better understanding of work and service for the Empire. This is true of the National Association for the Pre-

vention of Infant Mortality in Great Britain, which has just issued in a little book entitled "Mothercraft" the substance of an advanced course of lectures delivered under their auspices at the Royal Society of Medicine, London, England, from February to May, 1915. The work is published by the National League for Physical Education and Improvement at 4 Tavistock Square, London, W.C. Among the lecturers are Dr. Eric Pritchard, Mrs. Florence Willey, M.D., M.S., Herbert Cuff, F.R.C.S., Miss Florence Petty, better known as the "Pudding Lady," and others. Few readers who open this book will be willing to lay it down unfinished. It is so interesting, so sensible, so practical, and withal so modern and enlightened in point of view as well as in scope, that those who are responsible for the little volume may well feel that they have done something for their country in producing it and placing it before the public.

General Index to The Annals of Surgery.

The last ten volumes of the Annals of Surgery have been indexed and a copy can be obtained for the modest sum of one dollar from the J. B. Lippincott Co., Philadelphia.

Text-Book of Pathology. Delafield and Prudden. Tenth edition. Publishers: William Wood and Company, New York. Price, $6.00.

The mere fact that this work has reached the tenth edition shows how popular it has been. This is not surprising, as probably no authors have taken up pathology in such a clear and interesting manner.

The present edition varies but slightly from the ninth, which was published three years ago, the chief additions being the actual achievements in research work. The illustrations which have always been a feature of this work have a

few new plates added and are up to the usual high standard. The present edition can hardly be surpassed as a standard work in pathology. D. K. S.

The Travail of a Soul. By Geo. F. Butler. Chicago: Ralph Fletcher Seymour Co.; octavo, pp. 79.

This attractive volume, consisting partly of prose and partly of verse, is dedicated by its author "to the votary of exalted love." A very fine engraving of the Venus de Milo serves as a frontispiece, and every page is chastely illuminated. The printer and binder have done a piece of fine art.

The literary quality of the book also is technically good. The cultured taste will appreciate it. Those who enjoy the best things in literature will enjoy Dr. Butler's work. Unfortunately these are few. The rest will find it elusive and fail to receive the thrill they so much crave. Dr. Butler is likely to realize the poet's highest reward—the joy of his work and the appreciation of a few friends who, like himself, have the poet's vision. Even his sorrows, and every true poet has these, are a part of his equipment and are refined in the exercise of his art.

The casual reader may miss the poet's meaning, but the true student will find his pleasure in the work increasing with each re-reading. Possibly some condensation might have served to make the book more popular. Perhaps if steel hooks had been used instead of golden numbers, if the silver bells had given place to a wooden cross, the author might more securely have fastened to his message the attention it deserves. The cross is there, but it is of gold. A.D.W.

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Editorials

MEDICAL EDUCATION

No nation, no time, no chosen residential suburb, no man-made collection of homes, can ever be free from illness (and other deviations from normal) requiring the assistance of skilled medical attention. There must always be physicians, and it is to the best interests of the laity to provide excellent means for their education. Many of the heaviest expenses of the state are due to crime, idiocy and other features that are traceable to disease, and any economist will grant that living expenses would be greatly reduced if a wide modern eugenic and prophylactic movement were to take place. Living, then, being made comfortable for the masses, the physician's charges would be within reach of all, and he himself could occupy his proper place in society, educating his family rightly without fearing a yearly deficit, because his patients would always pay their bills.

The "man in the street" is just as much concerned in medical education as the physician. He

may need a physician—his son may become one. Any steps, therefore, taken to inform the public how to choose a good physician, how comprehensive his education should be, what his position, duties and limitations shall be, should be made the work of an investigating committee composed partly of laymen and partly of medical men. It cannot be denied that the war spirit has brought physicians and the mass of the people into closer friendship than ever, and now, when medical men are heading the lists for valor under fire, when there are so many needed at home to take the place of the absent, it is a telling stroke to remodel the plan of medical education, and determine its scope, its support by the government to the universities in building colleges, and how many, if any, "pathy" schools shall be regarded as really having any status or even a right to exist under the law.

The Government is tardy in this respect. We take giant strides, as a rule, in these new countries, where press, cable and wireless put us in a position to adopt at once any new measures formed by the older civilized nations. About two years ago, when Toronto General Hospital was opened, Premier Whitney, in his opening address, stated before one of the largest audiences ever collected in Toronto of people interested directly or indirectly in medicine, that the Cabinet intended to appoint in the near future a Commission to study carefully and report to the Government upon the whole subject of medical education. This caused a hope to glow brightly for

a while that all the wrangling among the sectional schools would be settled firmly by a parental oversight from a fair-minded body. It also suggested the thought that no amount of foolish lobbying, " caucusing " committees, or wasting of members' time would have any weight with the august body to be chosen as the Commission. Silence ensued, however, on the part of the Government for the long period of nearly two years. The various professional medical journals touched on the subject from time to time, but with no avail.

Suddenly, however, the appointment of Mr. Justice Hodgins, of the Supreme Court of Ontario, gladdened all those who have looked and hoped for the problems to be settled. It is now expected that the subject will be carefully, diligently and intelligently studied from every viewpoint, in justice and moderation, and that before too long a period elapses the report returned by the Commissioner will be presented and promptly acted upon by the Government.

Various bodies of nurses, dentists, and others coming into public life at a later date than the last legislation have asked for Government recognition, but in vain. Now, however, it is hoped that the limit of school formations is ended, that no new group can arise and say they do something that heals the body, even in part. The human frame has been pretty well covered by this time, beginning with the opticians and ending up with chiropodists.

Some healers demand incorporation and licensing on the ground that doing so protects the public

from being imposed upon by others. It might be said by the osteopath, "Give me a license, or my patients may make a mistake, go to a masseuse, and be bruised in the wrong place." The laity do not need quite so much protection. If they do not use their common sense, they should suffer for it. These misnamed schools in so many words say, "License us so that we may charge a large fee as specialists without fear of criticism from the Allopaths." They, students of a part of the body only, ask license so that they may at least act independently of or on an equal footing with the general practitioner.

The nurse, acquainted thoroughly as she is with the mechanical means of cure, such as enemata, douches, binders and other care of the patient's body, never does these on her own responsibility. That would be a flagrant violation of all that she has been taught. The patient does not come to her for diagnosis and treatment. The physician sends her to the patient to give the medicine and treatments he has ordered. She is a nurse and as such is at the command of the physician. As the true nurse is a handmaiden only to the physician, let her be put in a class by herself in this matter of legislation; classified, too, in such a manner that only a woman who has proved herself competent to care for a reasonable number of groups of disease, such as obstetrical cases, surgical cases, medical and contagious diseases, can have the legal status of nurse and command her remuneration. The nurse is taught constantly to look up to and obey

the physician. No such precepts are embodied in the teaching of the osteopath, who studies only a small part of the body and its functions, or of the quacks who approach the patient to heal, without any knowledge at all of the chemical or other changes going on in the human system. The man with toothache makes his own diagnosis and applies to the dentist, who performs a cure by mechanical means, in which, if he needs assistance, such as a general anesthetic or treatment of sepsis, he calls a regular practitioner.

But those persons who are not thoroughly versed in all the normal and pathological conditions of the body, those who take a "get-rich-quick" course in one mechanical or mental method of healing disease, should be bound under strict conditions. They should not be allowed to receive patients for treatment. It is true that there are some people so constituted that they frame ills for their own enjoyment, and finding no relief, since they want none, from the hands of those physicians who pierce their mask of deceit, they finally dip their flag to some scion of a new or peculiar sect so that they may be considered miracles in a class that cannot be refuted. It is also true that the exponents of some of these cults have effected cures through their good luck in the simpler conditions where only mild interference, *or none*, is necessary. But when a man is really ill, from some disease such as pernicious anemia, he cannot be cured by osteopathy. When he suffers from tetanus or diphtheria, prayer alone cannot cure him. When a

woman's generative organs are disturbing her whole nervous system, simple refraction and glasses will not cure the pain in her eyes. The licensing, therefore, of those so-called schools of mechanical art should be restricted so that the patient on going to such an office should be surrounded at once with sufficient knowledge to determine where he is, and just how far this sort of " practitioner " can help him.

Certain types of " schools " *should be eliminated at once* in a new fair country like this, since they do not contribute to the general weal. There are always a few people who want to be gulled, and there are always a few willing to undertake the job. If tolerated at all the basis of classification for license should be, " Are these men performing any duty in the relief of pain, the banishment of disease, or the general campaign for public health?"—Are they sufficiently versed in a general knowledge of the body to know whether they are injuring one part in treating the other? What guarantee has the public that they will not undertake to treat illnesses entirely outside of their limits? What is the length and breadth of their curriculum? Taking for granted that they have the natural disposition, the perseverance and preliminary education which grand old Hippocrates demands as essentials for a physician, it should be demanded of them *that they undertake the whole study of medicine.*

The man needed all over the world to-day by the sick is the diagnostician. That art can only be acquired by the regular five years' course of study

demanded ere the student is granted the license to practise.

The Judges of the Supreme Court acquire in their long career a keen knowledge of medicine in its relation to the community. They can study the close relations between physicians and their families. They appreciate better than others how disease warps the judgment, not only of the sufferer, but of his family, at times. We feel that the cause of medical education is in good hands when Mr. Justice Hodgins sits as Commissioner for the Government. We know that all right-minded people will give him every assistance in opening records and otherwise facilitating his research.

ACADEMY OF MEDICINE, TORONTO

THE opening meeting of the Academy of Medicine, Toronto, took place in the Mining Building, University of Toronto, on October 5th. The new President —Dr. W. H. B. Aikins—occupied the Chair, and Dr. J. H. Elliott acted as Honorary Secretary. The meeting was one of the most successful opening meetings ever held, the attendance being splendid. The number present proved the urgent necessity for a new Academy Building, something which all the Fellows hope will be realized ere long.

The programme was exceedingly interesting, particularly the Presidential Address, which we reproduce in this issue, and the Address by Dr. W. P. Manton, Detroit.

After the formal Minutes had been read and

adopted, Dr. H. B. Anderson read the Report of the Patriotic Relief Committee, followed by Dr. Powell, who presented the Report of the Hospital Supplies Committee.

The Presidential Address was full of interest and only too short, the reason for this being a little excessive modesty on the part of Dr. Aikins and consideration for the guest of the evening. Dr. J. H. Elliott formally presented two books from Sir William Osler, the books being Jenner's "Inquiry into the Causes and Effects of the Variolae Vaccine," London, 1798, and Rhazes' "Liber Nonus ad Almansoren," Venice, 1490. The Academy of Medicine is certainly under a debt of gratitude to Sir William Osler for this further contribution. Sir William has always been, and, we trust, will continue to be, a warm friend of the Academy. The subject of Dr. Manton's address was "Marriage Rites and Obstetric Practices among Ancient Romans" (with lantern demonstration). We only regret that we have not the opportunity of publishing Dr. Manton's address in full.

Dr. Aikins gave a delightful reception to the Fellows at his residence on Bloor Street after the meeting.

We trust that the meetings of the Academy for the current winter will be equally successful to that of the opening meeting on October 5th. The President and Programme Committee having devoted a great deal of time to preparing a goodly bill of fare for the Fellows throughout the winter months, we bespeak for Dr. Aikins the hearty support of all.

DR. CHARLES R. DICKSON, HONORED

At the annual meeting of the American Electro-Therapeutic Association, held at Atlantic City, N.J., September 14-16, 1915, by the unanimous vote of the Association, Dr. Charles R. Dickson, of 192 Bloor Street West, Toronto, was elected an Honorary Fellow with all of the privileges of an active member, the first time this distinction has ever been conferred upon a Canadian. Only eminent practitioners of medicine in good standing, or eminent electrical experts in good standing, are eligible for honorary fellowship. The active membership consists of regularly qualified practitioners of medicine or surgery, who are graduates of recognized colleges, and who must also be members of their respective local and national medical societies before being admitted to the American Electro-Therapeutic Association.

Many of the most widely known electrical scientists—Tessla, D'Arsonval, Thomson, and others equally distinguished—are on the honorary list, which is restricted to fifty in number. Almost every civilized country is represented.

Doctor Dickson was President of the Association in 1898, was its official representative at the International Electrical Congress in 1904 at St. Louis, Mo., and is now a member of its Board of Trustees. The doctor is Consultant in Electricity to Toronto General Hospital, and has been a member of its staff since 1889, when he organized its first Department of Electro-Therapeutics.

MORE HELP FOR OUR SOLDIERS

THE Academy of Medicine, Toronto, in conjunction with the Ontario Medical Association, have begun a work which will doubtless be followed up at once, or has already been, by the medical profession in the other parts of the Dominion. Kindness, patience, brainwork, endurance, forethought, are some of the essential features of the task it has set itself. The cardinal point is the after-care of the wounded, in sharp contrast to a period within our memories, when any wounded soldier became a school teacher, or flagman at a crossing, legless or armless, as the case might be. The plan suggested is to form a Reception Hospital, where the men will be treated temporarily, then classified, before distribution to general hospitals, sanitaria for tuberculosis, institutions for nervous cases, convalescing homes, etc., according to the necessities of the individual case. Preferably this clearing-house would be in a city or in the country near a city, where the services of a staff of doctors representing different special departments would be available.

The convalescent institutions should be in familiar surroundings, and not too far from the men's families, so as to banish excitement and drown the nervousness produced by life under a constant cannonade, as well as to produce a benign psychic effect through hearing English spoken all the time and seeing no foreign ways, foods or gestures.

The equipment will include good nursing, baths, massage, electrical treatment, gymnastics, and introduction to some of the trades for those not fitted

to return to their old occupations. The whole atmosphere will be surcharged with hope, otherwise extreme depression would be expected. But there will be steps taken soon to also put the wounded in touch with the Pension Department at Ottawa. Not so much does the true soldier mourn over his own lot as of his dependent family. This was beautifully expressed in the "Little Gray Home in the West," that was never successfully dethroned by "Tipperary." To assuage this anxiety in the minds of the fighting men, the physicians a year ago banded themselves together to give free care to the needy families of the soldiers now at the front.

Feeling has run so high in every Canadian heart that we feel sure no person will take an unfair advantage of the men who are so generously devoting their time to the soldiers as the doctors. Not only did many go, but they took their sons with them, while those who stay behind have their ear to the ground all the time for news to give them new ways of helping. Doctors and soldiers have been mates since time began, but never at any time or in any nation have the best qualities that manhood can afford been displayed so cheerfully. Over two hundred physicians in Toronto alone are engaged in treating the soldiers' families, while over sixty-six chemists have been supplying the drugs free for those cases.

We commend this noble work of establishing a clearing-house for the convalescent soldiers to every patriotic mind, and we doff the hat to the men who thought out the scheme.

Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., *must be* in our hands by the first of the month previous to publication.

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Original Contributions

PRESIDENTS' ADDRESS, ACADEMY OF MEDICINE, TORONTO

By Dr. W. H. B. Aikins.

The Medical Profession and the War—The Cancer Problem.

At a time like the present, when such momentous events are happening day by day on the Continent of Europe, and the destinies of the nations of the world are trembling in the balance, most of us find it extremely difficult to concentrate our minds on any subject which is not directly or indirectly connected with the war. This is not to be wondered at when we consider that it is by far the most terrible conflict recorded in history, the result of which will influence the future course of events throughout the whole of the civilized world. The state of things in Europe has been recently very vividly brought home to us in Canada, owing to the fact that so many of us have already lost those near and dear to us on the battlefield or in that great tragedy of the sea, the sinking of the *Lusitania*; but we rejoice to know that our soldiers have worthily upheld the traditions of our race, and that this country has reason to be proud of her sons.

In no previous war has the medical profession, not only of the British Islands, but also of the Overseas Dominions, played such an important part, and there was everywhere a prompt response to the demand of the Army for civilian surgeons to supplement the work of those belonging to the service. Many of the senior students in the various medical schools also volunteered for employment as dressers.

As you all know, the response from those of our profession in Toronto has been most gratifying. The Army Medical Ser-

vice of the First Contingent took many of the Fellows, and with the subsequent contingents, Clearing Hospital and University of Toronto Base Hospital, there has been an increasing depletion of our ranks. Sixty-one Fellows of the Academy of Medicine are now on active service. The medical student body of Toronto University has not been behind in their response to the call. Of the undergraduates in medicine, 6 officers and 88 men have gone, while there are 252 men serving from the graduate body of the Faculty of Medicine.

You will remember that very soon after the beginning of the war the Fellows of the Academy of Medicine pledged themselves as a patriotic duty to undertake, without charge, the professional care of the needy dependents of any men serving with the Allied armies during the war now going on; and you have this evening listened to the report of the Patriotic Relief Committee, and can realize how well and truly that pledge has been implemented by the Fellows of the Academy. From the report of the Hospital Supplies Committee you have also learned how very active the Fellows have been in this matter.

From all parts of the country came offers from private individuals of accommodation for invalid soldiers and sailors, and of large country houses to be used as convalescent homes for the sick and wounded. Australia, New Zealand, South Africa, India, and our own Dominion of Canada, have given splendid and magnificent assistance in hospital equipment and personnel, and in the sermon preached by the Archbishop of Canterbury, at St. Paul's Cathedral, on August 4th, the anniversary of the declaration of war, he says that, "the temper of the whole of the British Empire has been worthily reflected by medicine. A firm resolution to endure to the end and a hope for the victory of the right are displayed in the hearty co-operation between our citizens in all parts of the world in the medical conduct of the war." The United States has also done much to help in the treatment of our wounded soldiers, and has made generous contributions in the shape of hospital equipment and personnel.

The war can scarcely fail to have a more or less arresting effect upon medica; progress in some directions, in view of the fact that in all the countries concerned so many men engaged

in medical investigation and research have, at any rate for the time being, been called away from their work. The interruption to the exchange of scientific data is also a serious obstacle to progress. Many medical meetings which were to have been held during the present year have been postponed. The next International Medical Congress, which was arranged to meet in Munich in 1917, has suspended the work of organization, and in the *Deutsche Medizinische Wochenschrift* there is an editorial to the effect that it is probable that the feelings of hatred excited by the war will not have died out by that time, so that it would be difficult to welcome representatives of the countries now fighting Germany with any degree of cordiality. In fact Germany seems to be preparing for isolation from the external medical world, and it is announced that the German scientists have commenced a campaign against all medical words of English, French or Russian origin, and that a committee is to be formed for the purpose of framing a purely German medical nomenclature.

This isolation from the rest of the world may not be an unmixed evil if the opinion expressed by Dr. Greely in the *Boston Medical and Surgical Journal* of September 10th, 1914, is correct, namely, that in Germany the scientific side of medicine is over-developed, whilst the human side is greatly neglected.

The sublime ignorance of the facts in regard to the origin of the war shown in the extraordinary manifesto issued towards the end of last year by the German Intellectuals, including such names as the late Prof. Ehrlich, some of the assertions in which are in direct opposition to the statements contained in the German White Book, cannot fail to discredit German science. Can we ever trust the German scientists again?

Soon after the beginning of the war we began to realize how dependent we were upon Germany for the supply of certain drugs, in the manufacture of which she had acquired a monopoly. These included a large number of extremely valuable drugs, which had displaced many of the older remedies, such as the whole range of synthetic drugs, analgesics, antipyretics, alkaloids, salicylates and potash salts. The fact that Germany possessed a monopoly in the manufacture of aniline dyes has caused a very considerable inconvenience. The manu-

facture of many of these products had originated in Britain, but had afterwards been applied by German manufacturers. One of the chief difficulties in manufacturing them ourselves was that hitherto Germany had had an exclusive supply of the raw material required. There has since been considerable progress in the manufacture of the products formerly supplied by Germany, but there are still many difficulties to overcome before this industry is established on a satisfactory basis.

It is sometimes asked if war offers any compensations for the harm it undoubtedly does in hindering the advance of science? Much has already been learnt in regard to the proper treatment of septic wounds, and as to efficacy of inoculation in the prevention of the diseases which have in previous wars caused more deaths than the actual battles themselves. The vigorous efforts taken in Serbia by the British and American doctors have been so successful that typhus, relapsing fever, cholera and smallpox are now almost stamped out, and so far the health of our troops in France, in England, and at home has been extraordinarily good.

At the end of the first year of the war it may be said that the value of the medical work in the Army cannot be too highly estimated, and the practical absence of epidemic disease and efficient sanitary organization has meant a gain of innumerable lives to the allied armies. The heroism of the troops in battle has been equalled by that shown in the hospitals, and the wounded have been attended with courage, assiduity and success, often under the most trying circumstances. Very warm tributes have been paid to the courage and professional efficacy of the Medical Corps by the highest military and political authorities. They all agree that the medical men have rendered most heroic services, and that their courage and devotion is beyond all praise.

I quote the following paragraph from the *Daily Mail,* which appeared soon after the battle of Neuve Chapelle:—"A bright page in the story of British heroism in the battle of Neuve Chapelle is the conduct of the doctors. As always, they distinguished themselves by their fearlessness under fire and their gallantry. Their losses were heavy, for they exposed themselves without thought of danger."

Amongst the results of the war which are of special interest to us in Ontario is the establishment of medical reciprocity between Ontario and Great Britain. This became necessary on account of the necessity for those holding the license of the College of Physicians and Surgeons of Ontario to go with the Canadian Contingents to Great Britain and France, and therefore to work under the War Office. The Council of the College passed the enabling legislation in December last, the Lieutenant-Governor subsequently giving the Royal Assent. In the *Lancet* of September 4th a notice appears from the Registrar-General of the Council of Medical Education and Registration of the United Kingdom, containing the following paragraph:— "That any person holding the license or membership of the College of Physicians and Surgeons of Ontario, granted after examination in medicine, surgery and midwifery, together with a license to practise in that province, shall be entitled to register in the Colonial list of the Medical Register, providing he satisfied the Registrar regarding the other particulars set forth in Part II. of the Medical Act, 1886. Degrees in medicine granted by the Queen's University, the Western University and the University of Toronto may so be registered as additional titles, provided they are registered in Ontario."

It has been assumed by some that this war is likely to result in an enormous amount of more or less permanent nervous and mental suffering and incapacitation amongst the soldiers, but although there is no doubt that a certain number of them become unnerved by the horrors of the battlefield, time has shown that a large proportion of these recover after rest and suitable treatment. In an address recently given by Lord Bryce, he states that the effect of the fighting on thousands of our men has been to sober them, to stir their deepest thoughts, and inspire them with an urgent desire for a more idealistic basis of living, and he holds that the spectacles of millions of men abandoning home, family, ambition and money, and laying down life for a principle is so glorious as to transfigure the pictures of mangled bodies and human beings gasping in the dark struggle against death. He believes that one of the eventual results of the war will be the great decrease in the amount of mental instability.

and that people will return to a simpler life, partly from choice and partly from necessity.

Another fact of importance which we may here mention is that neurasthenia and other neurotic conditions are apparently becoming much less common, in spite of the anxiety and strain resulting from the war. This is not difficult to understand, as the experience of most people who have been accustomed to the treatment of nervous conditions indicates that it is not so much the great tragedies of life which are apt to upset the equilibrium of the nervous system, but small daily worries persisting for long periods of time, and above all lack of occupation and interest in life.

This war is certainly affecting the Fellows from a pecuniary point of view, in that many people who have been accustomed to employ physicians and to pay the ordinary fees can no longer afford to do so. The extent to which the war has affected the medical profession in this respect varies in individual cases, but there certainly seems to be no doubt that consultants and specialists are suffering more than the general practitioners, who in a few cases are benefiting more or less, due to so many of their colleagues having taken up military work of some kind.

Now as to the progress of the Academy since the last regular meeting was held, I may say that 27 new men have been elected, so that, counting in the 61 who are at present overseas, the total number of resident Fellows is 404, non-resident Fellows 42, life Fellows 5 and honorary Fellows 4, making a total of 455. Ten additional names will be submitted at the next Council meeting for election, and it is our earnest hope that before the close of this Academy year the total fellowship may come up to the 500 mark by the adhesion of a number of very able men in Toronto who have signified their desire to join with us.

SOME REMARKS ON MENTAL HYGIENE AND THE PREVENTION OF INSANITY

By Campbell Meyers, M.D., M.R.C.S., Eng., L.R.C.P., Lond.

The Provincial Inspector of Prisons and Public Charities states in his latest report that on October 31st, 1914, exclusive of the insane patients in the Homewood Sanitarium, at Guelph, there were in the Hospitals for the Insane of the Province of Ontario, 5,986 insane persons. The total population of this Province, as shown by the last census, is 2,519,907. Hence one person in every 420 of the entire population of Ontario is certified insane. Moreover, the number of patients in the Hospitals for the Insane is greater than the number in the General Hospitals of the Province. The Provincial Inspector of General Hospitals and Charitable Institutions states in his last annual report that on September 30th, 1914, the number under treatment in these institutions was 4,654. Hence 1,332 more patients were under treatment at this period in the Hospitals for the Insane than there were under treatment from all other diseases in all the hospitals of this Province, including the sanatoria for consumptives. This fact alone clearly indicates the importance and magnitude of the subject. The cost to the Province for the maintenance and capital expenditure of the Hospitals for the Insane in 1914 was $1,704,699.48, being about one-sixth of the total provincial income.

This appalling and ever-increasing number of insane is surely a subject for careful consideration, and renders the prevention of insanity one of the most important of the humane and economic problems which are before the people of this Province to-day. While a large proportion of the number of admissions to Hospitals for the Insane are now discharged as more or less completely recovered, there still remain in these hospitals a large proportion in whom the sunlight of reason, and all enjoyment of life, is forever gone—a vegetative existence in which often apparent physical health is combined with a single defect which produces a result sadder than death. Had the development of insanity been averted, the havoc wrought by

the storm of the developed attack on the brains of these individuals would never have been experienced, and the mental integrity never affected.

The mental suffering in insanity, especially during the early stages of the attack, has been justly said to be unequalled by that of any other disease to which humanity is heir. Nor is the suffering borne by the patient alone, since the relatives and friends must bear a profound grief—often over a prolonged period—when their sympathies and their powerlessness to afford either comfort or assistance makes them devoutly hope, for the patient's own sake, that the physical remains of life itself might be removed.

From an economic point of view the loss to the state is tremendous. The expense of treatment and maintenance is great, extending as it does for some of these patients for over fifty years. More important still, however, is the loss to the state of the individual's capabilities for good and useful work, in whatever walk of life he may have previously occupied—a loss which, morally, mentally and financially, it is impossible to estimate. If these facts only had to be considered, the question of the prevention of insanity would merit the most careful thought by all classes of the community.

Much more serious, however, than the appalling number of certified insane at present under treatment in the provincial hospitals is the fact that at least an equal number is each day steadily progressing towards the boundary line of insanity or passing completely over it, while practically no effort is being made to prevent this dire calamity. In other words, instead of the proportion of one to four hundred and twenty, as stated above, as being confined in the hospitals for the insane, there are at least another one in four hundred and twenty of our population who are daily nearing the same disaster without a single hand being extended to help them. (It is to be noted, moreover, that neither the number of the insane in the other provincial institutions, nor the large number of insane in this province who are not there confined, are considered in this connection.)

While the treatment of the insane has advanced by leaps and bounds during the past twenty-five years, no real assistance

has been offered to prevent the full development of the disease, and once this has taken place, no matter how skilful the medical aid may be, the restoration to mental health is, at best, liable to be only more or less complete. True, the hospitals for the insane have opened their doors to voluntary patients, but the fact remains that, with rare exceptions, the patients will not decide to enter into these surroundings and associations—a decision, moreover, which is perfectly natural—until the onward progress of their disease leaves no alternative and they simply drift onwards with the irresistible current to the inevitable whirlpool. It is, therefore, clear that if success in treatment is to be obtained for those liable to develop insanity, it must be in different surroundings and with different methods and associations than those in which the insane are treated.

Can insanity be prevented?

The answer is an emphatic affirmative in a very large proportion of the patients. How can this result be best accomplished? The answer here is by two methods, which may be described as (1) General and (2) Special. The former relating to general mental hygiene in the development of the individual, and the latter relating to the active treatment of the patient when symptoms of his condition are beginning to develop.

The General methods to be employed for the prevention of insanity comprise the upbringing of the child, especially in regard to its moral development; a wise degree of education, which comprises the avoidance of over-education in unsuitable subjects; a close observance of the laws of eugenics, especially the intermarriage of those exhibiting any mental weakness, or pronounced nervous affection, either in themselves or their forebears; the avoidance of alcohol; the prevention of syphilis (the two latter being especially prone to produce insanity); the cultivation of sound physical health and development by out-of-door sports; and the avoidance of pampering and self-indulgence, which are so prevalent in this twentieth century: in short, by the development of those qualities, both physical and moral, which tend to the promotion of the best possible health, in accordance with the rules of mental and physical hygiene.

The Special methods are applicable to the earlier stage of the developing disease, and include the steps necessary to obtain proper medical treatment for the condition.

In order to explain how prevention is best accomplished at this stage it is necessary to state briefly, and in a very general way, what class of insanity is most amenable to prevention, and then, what symptoms are to be found which indicate a danger of the full development of the disease.

It must be clearly understood that insanity rarely begins suddenly in ordinary life. The early symptoms in many cases are overlooked, or ascribed to other and especially physical causes, so that in those cases where the outbreak of active insanity is thought to have been sudden, a careful examination of the preceding nervous symptoms would clearly show that, in the large majority of such cases, the disease had been coming on, not only for weeks, but more often for months. Moreover, the advance of modern medical science enables a competent physician to foretell the outbreak of insanity often for weeks in advance, with at least as much certainty as that of any other form of disease. From this it will be readily understood that the outbreak of insanity is often preceded for weeks or months by symptoms which are commonly described as nervous, and the patient during this period is suffering from so-called neurasthenia, or nervous exhaustion. This by no means implies that all patients suffering from neurasthenia do, or will have, an attack of insanity. On the contrary, it is only when this diagnosis has been made that the fear of such a result may be considered, depending entirely, as it does, on the nature, the intensity, and the grouping of the symptoms. In other words, while neurasthenia frequently exists without any actual danger of insanity, insanity is rarely present in ordinary life without preceding neurasthenic symptoms, often of long duration. (An exception is found in the present war, where the mental strain and the shock of shell fire, etc., has been so great that mental derangement is often sudden in its onset.) It must also be carefully remembered that once insanity is fully developed it is too late for preventive measures, and that treatment in a hospital for the insane becomes generally imperative. Hence, treatment in an early state, when the symptoms are those of nervous exhaustion, not only will, in the majority of cases, avert a developing insanity, but thus also obviate entirely the necessity for asylum treatment. Again, there is no doubt that the

strain on the mental faculties of an individual who is obliged to pass through an attack of insanity, is liable to leave him—even when discharged as recovered—with more or less mental deterioration, so that he would be considered "not the man that he was." This unfortunate result would also have been obviated had the development into insanity been prevented by early treatment.

It must not be overlooked that insanity is a definite disease, having its origin in the higher centres of the brain, which is the chief organ of the nervous system, and that its location here is liable, especially in the early stages of the disease, to influence any or all of the functions of the various internal organs, since these depend primarily upon the nervous system for their proper performance. This explains how the various physical processes, such as menstruation, digestion—both in the stomach and intestines—the secretions, and the action of any or of all internal organs, may be affected when their centres in the nervous system become impaired in their functions, as is so often observed in neurasthenia.

As to the class of insanity most amenable to prevention, it can fortunately be stated that one of the most frequent and important forms of this disease belong to this category, viz.: that functional form which occurs in adult life, among persons who have previously enjoyed good mental health, and have already accomplished a fair share of life's work in proportion to their age, and in whom the symptoms usually follow such causes as overwork with anxiety, intense mental strain under adverse circumstances, or some pronounced nervous shock. That this form of insanity can be prevented in 75 per cent. of all the cases, when treatment is commenced sufficiently early, has already been clearly demonstrated by a practical experience of many years which were devoted to this purpose.

Before discussing the various symptoms it should be clearly understood that the symptoms of which a patient complains in neurasthenia are always as real to him as those of any ordinary physical disease. Because we often cannot see or locate any visible cause externally for the symptoms, we have become prone to doubt their existence. The prevalent conceptions of any pronounced illness have for so long been associated with pallor,

weakness, emaciation, and other physical signs in the patient, that it has been a natural mistake, when judging only from the possible lack of external physical signs of disease, to consider that all the symptoms of a neurasthenic are voluntarily intensified or even imaginary. Were the truth recognized, it would be seen that many of these patients struggled long to overcome their symptoms, but were unable to do so. It is this lack of knowledge, conjoined with a hasty conclusion, which is apt to lead many to think that the patient could do differently if he chose, or be quite well if he only believed it. If these persons would only consider that they themselves may one day be obliged to pass through the same ordeal as many unfortunates are doing in every quarter of the world to-day, the injustice and the unkindness of this view would be at once apparent to them—no one is immune. Moreover, in the discussion of the symptoms which follow, it is assumed that the patient has previously enjoyed good mental health, and the grouping of the symptoms here given, whilst purely arbitrary, is intended to indicate how their symptoms, when untreated, may become gradually intensified from a comparatively simple nervous affection in the early stages to a most pronounced disturbance of the functions of the brain—a fully developed insanity.

The symptoms, of which only a limited number may be mentioned here, comprise—especially in the early stages—complaints of disturbances of the various physical processes, such as are mentioned above, of which functional disturbances of the generative system in women and the digestive system in man, are the most frequent offenders. These symptoms may be accompanied in their onset by noticeably nervous symptoms, which latter, unfortunately, in the past have been too often regarded as "reflex" in their origin from the physical disturbances, instead of being recognized as definite evidence of the general nervous condition. As the disease advances, the nervous symptoms gradually become more evident: sleeplessness develops, and this is often attended by disturbing or horrible dreams, the patient awakens tired and unrefreshed in the morning, even after a fair night's sleep. Undue irritability is often present, with a decided tendency to worry over trifles, loss of confidence, and marked indecision—the simplest questions

being solved only after much difficulty and hesitation; an inability to concentrate the mind for any length of time without an undue effort, which is followed by intense fatigue; reading an ordinary article, as in a newspaper, may be difficult, and the patient cannot remember or enjoy what he reads; the emotional equilibrium is easily upset, so that a strong man will shed tears without any apparent adequate cause; the lack of confidence in himself may extend to his surroundings, so that his sense of security is lacking, and fears of various kinds arise, such as the fear of being alone, or in the dark, or in open places, etc., these fears being as real to the patient, on account of his condition, as though some immediate danger were actually present; any mental effort may be commenced in good form, but rapid exhaustion follows; a lack of interest gradually develops in the usual affairs of life, and he becomes increasingly introspective; depression may now appear, at first slight and only occasionally, being easily shaken off, but later it returns with greater force, and the patient is only able to rid himself of it by a stronger voluntary effort; the courage, brightness, energy and optimism, which had characterized the individual previously, are now steadily diminishing, and he gradually begins to feel doubtful about his recovery; the ordinary affairs of life no longer interest him as they did formerly; his intellect is as clear as ever, but he is unable to sustain any prolonged intellectual effort; the daily work, which hitherto had been done cheerfully, now becomes an ever-increasing drudge, and finally is no longer possible. The patient realizes all these changes, and does his best to rid himself of them, especially with the help of friendly advice, but he can only do so temporarily, as they constantly return with increased force.

It must be here noted that the above symptoms have all increased gradually in their intensity, and may have occupied months of time from their onset to this stage of the disease.

All these symptoms, which are termed psychical, indicate a diminished resistance and a disturbance of function of the higher centres of the brain, and are just as characteristic of a disturbance of the cells in these centres as a yellowish discoloration of the skin is of a certain disturbance of the cells of the liver. Efficient treatment at this stage of the disease would result in the recovery of 80 per cent. of the patients.

If we now suppose the disease has not been efficiently treated, and that in its onward progress all the symptoms have steadily become intensified, what will be the next stage? The sleep has become less and less, until the patient often believes he gets little or none; the inability to concentrate the mind has increased to such an extent that the simplest duties are performed only with difficulty; the depression has become more marked and constant, so that while the patient may be induced to smile from time to time, the hearty laugh of former times is no longer heard; he is more discouraged about his prospect of recovery, and, owing to his inability to work, he fears his usefulness in life has passed, and that he will become a burden to his friends. At this time thoughts of self-destruction flash across his mind, but are promptly dismissed from ethical or moral reasons. While discouraged about his recovery, he still clings to the hope of getting better, and desires to do so. At this stage his disease has become much more serious, and the outlook for the prevention of an attack of insanity much less bright than before. It may safely be predicted, however, that treatment would still save 50 per cent. of these patients.

If we pursue the onward course of the disease still further into another stage, we find that the inability to concentrate the mind has led to a state of habitual distraction; the discouragement has become more intense and the futility of trying to prolong his existence is ever present with him; at this time thoughts of suicide as the best means of escape from his trouble are constantly with him, and he is unable to rid himself of them; they steadily assume a more definite form and either a deliberate attempt to take his own life is made, or on a sudden impulse he ends the scene. Should this not occur, or have been unsuccessful, the symptoms grow steadily more marked; he finds that all interest in his family has disappeared, his entire thoughts being centred on his own misfortune, which is steadily becoming greater; the fears he had earlier in regard to external objects gradually extend to imaginary evils, and he is terrified by them; he asks himself why this great misfortune has come upon him, and tells himself it must be for some great evil which he has done which has caused God, and all his friends, to desert him; or he may hear a voice in the stillness of the night telling

him of dreadful things about to happen to himself, such as being burned in a fiery furnace, or suffering some horrible torture, etc., the reality of which to the patient is often very evident from his actions.

During this stage the patient has passed over the boundary line of insanity, and even the friends can no longer conceal the truth from themselves, and they awaken to the dreadful reality that his disease has so far progressed that treatment in a hospital for the insane is often the only alternative which remains.

As the above symptoms are different from those of ordinary physical disease, so must the treatment be different, if it is to be successful. The first essential is to remove the patient from the surroundings in which his trouble developed, and to place him under the charge of a physician in whom he is entitled to have confidence. If the patient remains in his own home, or his usual surroundings, the pernicious influences which induced his disease still remain to produce further irritation and thus counteract the benefit of his treatment. Moreover, in a patient's own home, where he or she has been accustomed to direct, it is doubly difficult to give up everything to follow the prescribed course of treatment. Again, the visits of friends in the home, be such either social or business friends, disturbs the necessary mental quietude of the patient, and these friends may often suggest, in all kindness, other remedies or other plans of treatment which, from their disturbing effect on the patient, are often most harmful to his progress. Again, a home is not provided with the facilities required for successful treatment, and these can only be had in a hospital devoted to the purpose. A most frequent mistake is made by taking half-measures, which are nearly always failures, and a more severe stage of the disease has to be contended with, owing to the time which has been wasted and the further discouragement to the patient which has ensued. It is much better in this, as in other affairs of everyday life, to make a business of it and succeed. It is often suggested that as the patient is only nervous a little rest and change is all that is required. While much depends, of course, on the symptoms at the time, it is always well to remember how the disease *may* progress, and be governed accordingly.

The nursing of these patients is most important, and requires a long experience with these conditions to be really efficient. The problem of being nursed by a near relative is often present, but of this it may be said that however serviceable such might be in a patient suffering from an ordinary physical illness, the result here is usually unsuccessful, owing to the special type of disease; and the nurse often breaks herself down without having in any way improved the patient's condition. Hence, removal from home is usually imperative if the disease is at all severe, and once this has been done, it is better to keep the patient out of touch with it (except to know that the family are well) until he has made some decided progress on his way to recovery.

Once the patients find themselves in surroundings in which they have confidence, where every detail of their treatment is carefully planned for them without any effort to decide for themselves, and where the knowledge of such conditions on the part of the attending physician assures every confidence in him, they will at once experience relief from their symptoms, and will be only too willing to carry out all treatment, feeling assured that they will soon return home fully restored to health.

[At the meeting of the Ontario Medical Association, held in Peterborough, May 25th-28th, 1915, the following resolution was moved by Dr. Meyers and seconded by Dr. Hamilton: "That this Association desires to place itself on record in favor of active steps being taken immediately for the prevention of insanity by the establishment of separate Neurological Wards in general hospitals, especially in those hospitals in which clinical teaching is given." Carried.—Ed.]

DISABILITIES,
Including Injuries Caused by Bullets, Shrapnel, High Explosives, &c., as Illustrated by Cases Examined before a Medical Board at Canadian Headquarters, Shorncliffe, England *

BY A. PRIMROSE, M.B., C.M., EDIN.,
Lieutenant-Colonel, No. 4 General Hospital (University of Toronto), Canadian Expeditionary Force.

(Continued from October issue.)

8. Defective Vision: Deafness.—Several men had been found unfit for duty because of defective vision, chiefly myopia and astigmatism. Most of these had a high degree of myopia, in one eye only, the result in most instances of a slight strabismus. Such men are incapacitated for shooting and must therefore be considered unfit to go into action. Deafness is obviously a great handicap to a soldier and where at all marked the man is absolutely unfit for service. One man was very deaf and told us he was unable to hear the words of command.

9. There were other conditions such as epilepsy, chronic alcoholism, and lateral curvature of the spine, of which we had examples. One man had a most exaggerated degree of lateral curvature with fixed deformity, rendering him absolutely unfit for duty. The epileptic is obviously unable to serve at the front. He is a source of danger to his comrades and at any moment may become quite incapable of looking after himself.

A study of all these conditions emphasizes the importance of adhering absolutely to Army Regulations in the Recruiting Office. Many of the conditions enumerated in the above list are examples of the failure to comply with these regulations on the part of the Medical Examiner at the time of enlistment. We note these conditions in order to urge that more care should be exercised in this particular. Men who are thus physically unfit and who are permitted to enlist have a miserable existence for weeks or months until finally they are compelled to relinquish

* Submitted to the Director of Medical Service, Canadian Contingents, and approved, August 23rd, 1915.

the effort to continue their duties. Few of these men ever reach the front, they are a source of expense to the country, and have served no useful function. Many of them have done themselves permanent injury in the attempt. It is therefore obvious that, in the interest of the individual and of the country he seeks to serve, such cases should be rejected at the recruiting office.

We shall now proceed to deal with disability arising primarily as a result of injuries received while in action.

1. Gas Poisoning.—There were 96 cases before us. We saw no recent cases; they, with, I think, no exception, were men who had been poisoned at Ypres on the 23rd or 25th of April, i.e., three months after having been subjected to the fumes. As far as our observation goes it would seem that while the Germans inflicted serious damage on our troops during those few days in the latter part of April, they never succeeded again in their diabolical effort to gain ground by this contemptible method of poisoning men. Prompt measures were taken to protect our men against the influence of gas, and these efforts seem to have been wholly successful, so that it seems certain that no further injury will be caused by such means. It is true that some cases of short exposure to the influence of gas have occurred since April, but the effects of these have been very evanescent. Regarding the more serious effects of gas we learn that not a few cases proved fatal soon after exposure or within the first few days. In our Board work we had to deal with many cases of serious poisoning who had passed the initial danger but were still suffering from symptoms more or less distressing. Shortness of breath was complained of on exertion, or, at times, coming on apart from exertion, the man occasionally waking at night with dyspnea. These men usually complained also of excessive secretion with expectoration particularly in the morning. The physical signs on examining the chest were practically negative and it was remarkable that one was never able to detect by this means any serious lesion in the lung. Next in order came marked gastric irritability, evidenced by the fact that the man was unable to retain any solid food. Many of these cases were able to take milk and soups, but the

moment they took solid food of any description they vomited. Occasionally we were told that the man would vomit in the morning only, this occurring immediately upon his first meal for the day, no matter what type of food was taken, but that he had no trouble with dinner or supper provided he took fluids.

Over a period of weeks in many cases there had been no improvement. We also got a history in several instances of hemorrhage from the bowel with diarrhea and hematuria in the early stages.

The problem which thus far we are unable to solve is whether or not the damage done to the gastro-intestinal tract or to the respiratory organs is permanent. These men continue to have symptoms three months after the exposure to the gas, and occasionally with little or no tendency to improve. We have no previous experience of such cases to go upon and we are therefore quite unable to determine whether the damage done is permanent or not.

The cases of gas poisoning frequently were victims of other injuries, suffering possibly from nervous shock or from wounds.

2. Exposure to Cold and Wet in the Trenches.—This, as we have seen was sometimes the cause of lighting up a latent pulmonary tuberculosis or again it induced rheumatism, sciatica, etc. Frost bite of the feet was observed in a number of instances; the exact nature of this is not quite evident. The men in cold weather were standing in water, wearing boots and putties, the feet and legs were soaked. This, as we know from reports from the front sometimes induced extensive gangrene resulting in the loss of the foot or leg. We saw the minor effects in those who had recovered after a superficial ulceration such as would result from frost bite and often the characteristic painful and congested cicatrix was producing marked disability.

3. Nervous Shock.—Men exposed in the trenches to heavy shell fire are inevitably exposed to nerve strain and the effect produced varies within wide limitations. Occasionally there is a somewhat sudden and complete breakdown with results which continue for months. At other times a man may come

through all this nervous strain and possibly receive serious wounds without any appreciable collapse of this nature. Some men who suffered in a severe degree appear to be complete wrecks. They are usually very emotional and may break down as they are telling their experiences. Tremor is always a characteristic symptom. The hearts' action is rapid, the pulse being from 100 to 120 per minute. The knee jerks are markedly exaggerated—insomnia, anorexia, and a constant feeling of fatigue are common. The man is wholly unable for sustained effort of any kind, his memory is frequently defective and he is obviously worried and apprehensive. These men should have every consideration and should be provided with a suitable environment to ensure recovery. A period of months must elapse before a man who has severe symptoms is fit to assume duty again and occasionally years may elapse before recovery. It is therefore difficult to arrive at a conclusion in endeavoring to predict how soon the individual case will be physically fit for duty. We are told by those at the front that the tendency is to send these men into action too soon, the result being a second breakdown under much less strain than at the first. Our impression is that many cases of the exaggerated type will never be fit for active service during the present war.

4. *Head Injuries.*—(*a*) Injuries to special senses. Vision was impaired by various types of injury. There were twenty-six cases of loss of one eye in most instances enucleation had to be performed and subsequent to the injury because of the extensive damage which had been inflicted. Then again injuries by bullets or shrapnel in the neighborhood of the eyeball not infrequently resulted in separation of the retina or hemorrhages causing permanent impairment of vision. *Deafness.* This results from the effect of high explosives, the drum may be perforated and resulting otitis media may cause serious trouble. The auditory nerve is also affected in many instances and thus permanent damage may be done. *Affections of Speech.* This gives us some most interesting conditions of which perhaps *stammering* is the most remarkable. For example, a man of twenty-two was in the trenches when a shell knocked a portion of the parapet over on top of him. He was buried under debris

and rendered unconscious. He wakes up some two days afterwards in the hospital at Rouen. He had a flesh wound of the right leg caused by shrapnel, but this healed readily. When seen by us two months after the injury his mentality was perfect, he could read and understand readily all that was said to him, but he had largely lost the power of continuous articulate speech. His effort to say "Yes," in reply to a question, for example, would be accompanied by irregular contraction of various muscles. He jerks his head spasmodically, his arms twitch and he slaps his thigh until finally he succeeds in pronouncing the word which comes out in a final spasmodic fashion. If it is a sentence, then after he manages to pronounce the first word the whole sentence comes rapidly one word succeeding the other with great speed. The difficulty seems to be in getting the initial word. It would seem as if when the motor centre for speech is stimulated there were an overflow of stimuli to the centres controlling movements of the head, neck and arms resulting in irregular muscular contraction. Numerous instances of less marked stammering were observed from similar injuries and one learns on inquiry that it is quite a common occurrence as the result of injuries in action. In the cases observed it is obvious that improvement takes place slowly, but the prospect of final complete recovery is good.

Fracture of the Skull.—We had a few examples of this, but judging from our experience one would conclude that practically all cases in which a bullet perforates the cranium and brain result fatally.

(*To be continued.*)

Militia and Naval Medical Services and Ambulance

Dr. Colling, College Street, is now attached to No. 9 Stationary Hospital, R.A.M.C.

Major (Dr.) F. W. E. Wilson, of Niagara Falls, is still at Shorncliffe, as D. A. D. M. S. of the Canadian Training Division.

Capt. (Dr.) Magwood, of Toronto, has been added to the Unit, No. 2 Casualty Clearing Hospital, now known as the C. A. M. C. This hospital was recently moved over to "somewhere in France."

No. 4 General Hospital (University of Toronto Base Hospital) left England on October 10th for "somewhere in the Mediterranean."

Dr. Oswald C. J. Withrow, who has joined the 81st Battalion as medical officer, will be a decided acquisition to the newest of Toronto's units, as in addition to a ripe medical and surgical experience, he has been for two years with the 10th Field Ambulance. Before becoming attached to that branch of the service he served in the 96th Lake Superior Regiment.

Lieut.-Col. Dr. H. A. Bruce returned to Toronto on October 8th, after spending several months in the different Canadian War Hospitals, including the Duchess of Connaught Hospital at Cliveden; Shorncliffe; No. 2 Canadian Stationary Hospital at Le Touquet, France; No. 3 (McGill) General Hospital at Camiers; and No. 1 Hospital near Etaples. Dr. Bruce speaks in the highest terms of these hospitals and, when away, had the pleasure of meeting Major Dr. J. T. Clark, Capt. Dr. Pentecost, Capt. Dr. Wood, Capt. Dr. McEwen, all of Toronto;

Major Dr. Elliott, of Cobourg, Ont.; Col. J. T. Fotheringham, of Toronto; Col. Dr. Foster, of Ottawa; Lieut.-Col. W. D. McPherson, of Toronto; Major Dr. E. P. Hardy, Captains P. G. Brown, Jeffs, Jeffrey, J. J. Fraser, and many others.

FORTY TORONTO DOCTORS FOR ACTIVE SERVICE

Toronto General Hospital is losing a large part of its medical staff by the transference of its senior house surgeons to the R.A.M.C. for overseas. Forty doctors from the Toronto division have been selected by Lieut.-Col. F. W. Marlow for the Royal Army Medical Corps in England, and these have been ordered to prepare to leave at once.

The list includes:—Lieutenants C. C. McIntyre, A. R. Riddell, S. A. Walker, S. M. Dale, P. J. Harris and G. A. McLarty, all A.M.C. men and senior house surgeons, Toronto General Hospital. Lieut. E. H. McVicar, A.M.C., and St. Michael's Hospital. Dr. R. R. Young, Toronto Western Hospital, and Dr. C. E. Wilson, of Muskoka Hospital, also selected. Other doctors selected are:—Lieut. A. B. Mofatt, acting medical officer for artillery; Lieut. J. Cunningham, Camp Hospital staff; Lieut. P. P. Rogers, 21 Lindsay Avenue, Toronto; Dr. V. E. Cartwright, Gravenhurst Hospital; Lieut. G. Carleton, 154 Danforth Avenue; Lieut. F. L. Thompson, 11 Farnham Avenue; Dr. D. A. Warren, Hamilton; Lieut. R. Home, 674 Spadina Avenue; Dr. T. R. Phipps, 1394 Queen Street West; Lieut. A. M. Murray, 576 Danforth Avenue; Dr. W. A. McLeod, Elmsdale, Ont.; Drs. H. C. Sutton, Port Credit; J. W. Wheeler, Cornwall; A. W. Nixon, Georgetown; A. G. Wallace, Thessalon; E. Bryceson, 62 St. Clair West; J. J. Hurley, 6 Dundonald Street; W. S. Grimshay, 462 Avenue Road; H. C. Moyle, Burlington, Ont.; W. B. Seaton, Clifford and Toronto; M. D. Kyle, Fergus, Ont.; W. E. Dean, 337 Palmerston Boulevard; N. N. Ferguson, 1253 Dundas Street; W. W. Conise, 496 Spadina Avenue; G. Cooper, Charlton, Ont.; Capt. M. H. Embury, Allandale; Lieuts. D. M. Kilgour, 152 Carlton Street; A. M. Robb. 181 Perth Avenue; F. A. Ross, Barrie.

AN IDEAL RESORT FOR CONVALESCENT PATIENTS

PHYSICIANS have frequent opportunities of referring those convalescing from illness to a resort where they can quickly recover their old-time vigor and enjoy an almost ideal climate, 2,500 feet above sea level. Such a resort is Virginia Hot Springs, just one night out of New York. The management have spent a huge sum of money on this choice spot in "Old Virginny," and are anxious that the Canadian medical profession should continue to refer cases there, as they have done in years gone by. The Homestead Hotel is one of the handsomest houses in America. It is built of solid brick, containing 500 guest rooms, with many parlor suites and 300 private baths. It is spacious, dignified, quiet and restful, with magnificent mountain views on every side. It is no exaggeration to say that Hot Springs means the Homestead Hotel. The Company owns 5,000 acres surrounding the hotel, so that physicians can understand that their patients have every opportunity of enjoying outdoor life and regaining thereby their normal strength.

The dominant factor making Hot Springs world-famous is the cure in which the climate as well as the water assist. The waters are conducted by gravity to the bathhouse and distributed fresh from the ground to the bathing apartments on different floors without loss of heat or its increase by artificial means, and fully charged with all their gases and other health-giving qualities. At none of the celebrated places in Europe, and at no other springs in America, is the temperature prescribed for hot baths that at which the water actually emerges from the earth in the natural springs.

The springs are beneficial, not only for bathing, but for drinking. Besides the hot springs, the effects of which as drinking waters are pronounced, there are magnesia, sulphur, and soda springs within the grounds, and alum water from a spring not far distant. The water from the soda spring comes strong and clear from the ground at a uniform temperature of 74 degrees. Physicians should address for full information H. Albert, Esq., Hot Springs, Va., U.S

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Editorials

GETTING RICH ON THE FOIBLES OF GULLIBLE NEUROTICS

UP to the date of writing, the Medical Commission has had several sessions in the Private Bills Committee Room, Parliament Buildings, Toronto. The Medical Commissioner, Mr. Justice Hodgins, K.C., has certainly created a favorable impression as to his fair-mindedness. The Medical profession of Ontario have already been represented by various bodies, that have laid their cases before him and have in every instance received a most courteous hearing. The University of Toronto, through President Falconer and Dean Clarke, the Ontario Medical Association, through Dr. R. A. Reeve, Chairman of the Legislative Committee, President H. B. Anderson, and several members from outside points in the Province, and the Academy of Medicine, through President W. H. B. Aikins, Dr. A. J. Johnson (Chairman Conjoint Committee), Dr. Goldwin Howland, Dr. C. R. Dickson, Dr. C. J. C. O. Hastings, Dr. Fitz-

gerald, Dr. J. H. Elliott, Dr. A. A. Macdonald, Dr. D. J. Gibb Wishart, and others, presented their facts before the Commissioner during the last week of October and the first week of November. We were gratified to find that without a single exception they were of one opinion in reference to the absolute necessity of the legislation under consideration by the Province, and insisted that members of every cult or 'pathy should take first a complete medical course, consisting of matriculation examination, a five year university course, and the license from the Ontario College of Physicians and Surgeons, *before* practising any branch of medicine. As we stated in our last issue, this *must* be the foundation as it is positively ridiculous that adherents of any cult should be allowed to interfere with the human frame without having first a full medical knowledge. We were, therefore, more than pleased to find that every deputation sounded this note of warning, a note which we feel sure the Commissioner cannot very well overlook.

The profession of medicine is facing a crisis. The crisis does not affect directly the interests of those who practise, so much as it does the interests of the public. It is a crisis in the protection of the public. Legislatures are created for the benefit of the people. The legislation on the statute books is in large part for the protection of the people, and that often against themselves, or against their meaner selves. Some of the shrewdest business men are utterly devoid of even ordinary common sense in matters

that pertain to their bodily health. A long list of men might be named, who have laid down their lives in an inglorious cause, victims of devotion to an utterly absurd health-cult. Such lives are too valuable to be lost to the nation. Therefore, it is the duty of legislators to enact laws that will make men preserve their health, and their helpfulness to their fellow men, in spite of themselves. A citizen is not allowed to commit suicide in the ordinary sense of that word. He should not be allowed to cut short his life by neglect of the generally recognized methods of treatment of disease. Likewise, he should be protected from unqualified, ignorant, and, therefore, criminal followers of so-called healing cults, who have no other object than that of growing rich on the foibles of gullible neurotics. These patent facts were recognized in the early years of last century, when this Province was yet young, and when strenuous efforts were made by self-sacrificing leaders in society to protect the public against such dangerous imposition. We cannot do better than quote here from the presentation made by the President of the Ontario Medical Association before Justice Hodgins.

"At the outset, may I direct attention to the fact that the legislation passed from time to time to regulate medical practice in Upper Canada, afterwards the Province of Ontario, culminating in the laws under which we are now governed, was for the purpose of affording protection to the individual and the community from unskilled, ignorant medical practitioners and quacks by which the country was overrun

at an early period in the history of the Province. So much was this the case that there was a public outcry and demand for protective legislation. To substantiate these statements, may I submit the following:"

The Medical Profession in Upper Canada, Canniff, page 26. Extract from an article contributed by the late Bishop Strachan, 1812:—

"The Province is overrun with self-made physicians who have no pretensions to knowledge of any kind, and yet there is no profession that requires more extensive information. They comprehend not the causes of nature of disease, are totally ignorant of anatomy, chemistry and botany; many know nothing of classical learning or general science. It is, indeed, preposterous to expect a judgment and skill, a nice discrimination of disease or a proper method of cure from men who have never been regularly taught, who cannot pronounce, much less explain, the terms of the art they profess, and who are unable to read the books written upon the subject. The welfare of the people calls aloud for some legislative provision that shall remedy this increasing evil; any examination, however slight, would terrify nine-tenths of the present race."

Page 36.—"Richmond, October 17, 1817.—ADVERTISEMENT.—This is to certify that I, Solomon Albert, is Good to cure any sore, or any Complaint or any Pains, Rheumaticks Pains, or any Complaint what so ever the subscriber doctors with yerbs or roots. Any person wishing to employ him will find him at Dick Bells. (Sgd.) Solomon Albert."

Page 28.—"That illiterate and incompetent persons found their way into Upper Canada during the first fifteen years of this century may be gathered from letters which appeared in the *Kingston Gazette*. In the *Gazette* of June 2nd, 1812, is a letter from Gananoque, signed 'Candidus,' giving a copy of an account

sent to Mrs. John Gould by a 'Self-taught physician of this Province':

"'The estate of Mrs. John Gould, dr.

"'To dr. for medsin and attendants whene he was chokd with a large peas of butter no meat—3."

A second letter signed "Credulus" refers to "certain medical gentlemen who have out of pure charity come into this country from the neighboring States to cure us of all our maladies.' They do not use opium or calomel, but charms. He gives an account of the treatment of a tumor by stroking and using certain words to drive away 'the devil's swelling.'" A third letter is about a shoemaker who went where unknown to practice, and who, being called to see a case of dropsy, pronounced it pleurisy, and declared that "floglottomy" was demanded to reduce the body to natural size; but on being exposed took a hasty departure.

A fourth letter refers to a bill sent in by a doctor, with a deduction of 6 "for killing your son." This was because the doctor had carried the smallpox to the son, who died of it.

The following is an indication that at Kingston, in 1815, the more intelligent public saw the necessity of protection against incompetent men. *Kingston Gazette* contains the following:

"To the public. *Facilis Descensus Averni.*

"The Parliament of the Province, during the last session, provided in part against the imposition of empirics in medicine. This was not more necessary for the safety of the diseased than the reputation of the faculty." Then follows an earnest appeal to the public and Parliament against quacks, their danger "without one ray of science," who "presume to thrust the created into the presence of the Creator." Signed "W" (not of the profession, he says).

"It was no question of conferring unusual privileges on a body of medical men for their own benefit, or to create a monopoly, but to give them power to ensure to the people of the Province the services of well educated, properly trained practitioners to

attend them in sickness. We believe it, therefore, of much importance that there be a clear understanding of the chaotic and unsatisfactory condition of medical practice which gave rise to the public clamor for protection, and which resulted eventually in the establishment of the College of Physicians and Surgeons of Ontario."

Medical men are not a close corporation. Their ranks are always open to those who are striving to solve the problems of health and disease. But, as was so emphatically stated by the President of the Academy of Medicine and other Fellows, before the Commission, the *sine qua non* of admission to the profession must be a thorough, complete training in the fundamental principles of medicine, prolonged sufficiently to render the practitioner of medicine—let him belong to whatever school he may choose—a safe guardian of the valuable lives entrusted to his care. Dr. Fitzgerald stated the case clearly when he asserted that one of the chief functions of the doctor of to-day is the prevention of disease, not its cure. No man is fitted to do his share in this all-important department of medicine, without that thorough training, which needs five years at least for its foundation and many more years of faithful study and observation, to complete the structure. Two of the leading Universities of this Province have virtually placed themselves on record in favor of a six-years' course in medicine. This is no time to let down the bars. The looseness of medical regulations has too long been a disgrace to education and

culture in this banner Province. It ought not to need a Commission to show where the lines should be drawn. When a cigar-store keeper can go to Chicago, spend three months in some money-making institution, buy his diploma and a four dollar electrical machine, then open up an office in this centre of higher learning and enter on "the practice of medicine," without let or hindrance—then the legislators of this Province should blush with shame.

But, it behoves us all, at this time of crisis, to examine our motives and see where we stand. What kind of men are being graduated from our Universities? What ethical principles are they taught? Are we and they keeping ourselves true to the noble traditions of the noble calling? Is the almighty dollar, the big fee, wielding too great an influence over our own practice? Is the same motive, through the force of example, affecting the ideals of the students? Our forbears in medicine in this country, as in the Old Land, were the peers of the greatest heroes in the world's history, laboring not for filthy lucre, but for the love of science and for the helping of those in distress. Surely, in these days of stress and strain, when so many of our best colleagues have unselfishly sacrificed home and family and comforts and everything else that is dear, for the sake of country and liberty and justice, we must at least abandon every unworthy motive and strive to uphold the noblest ideals and most sacred traditions of medicine.

We trust that Mr. Justice Hodgins will be able to get his report to the Legislature in time for this winter's session of Parliament, it being all important that this whole question be settled at the earliest possible moment.

THE MILITARY HOSPITALS COMMISSION

It has been very gratifying to us to find that the editorial appearing in the November issue of *The Canadian Journal of Medicine and Surgery*, entitled "More Help for our Soldiers," is receiving such general endorsement. It seemed to us to be essential then, and still more so now, that the boys who return from the front, sick or wounded, should receive first consideration. We are glad to learn from the Military Hospitals Commission that matters are progressing most favorably. It is all-important that the problem of providing employment and a new start in life for the members of the Canadian Expeditionary Forces who return to Canada should receive the most careful attention. Up till recently, however, very little seemed to have been accomplished, but we understand that matters are now well under way and that definite steps have been taken towards the arranging of a series of Convalescent Homes for those who require a rest in order to recover their health. A recent amendment was made to the Act empowering the Commission "To deal with the question of employment for members of the Canadian Expeditionary Forces on their

return to Canada, to co-operate with Provincial Governments and others, for the purpose of providing employment as may be deemed necessary."

Frequent meetings of the Commission have been held in Ottawa and elsewhere, one of the most recent acts accomplished being that The Bishop Strachan School on College Street, Toronto, has been accepted as a Clearing House for the soldiers who return, and it is intended that advantage will be taken of the offer of a number of specialists in Toronto, who will give proper attention to the men who are in need of attendance.

We trust that the Commission will give careful consideration during the current winter to the whole subject, thus guaranteeing to our returned soldiers that, if their health has been in any way impaired through their work in the trenches or elsewhere, every step will be taken to, as far as possible, guarantee them a return to normal health, so that they may be once again made useful and healthy Canadians.

THE ONTARIO MEDICAL ASSOCIATION—ITS PLANS FOR 1916

ORGANIZATION and preparedness are the watchwords these days, and so it seems fitting that the Ontario Medical Association should make plans early for the Annual Convention to be held in Toronto in May, 1916. Work is now being done, not only to insure success at the next meeting, but also to co-operate with the profession throughout the Province

in organization of County Medical Societies along the lines approved of by the Peterborough meeting. The latter is a big task, but seems well worth while, and should commend itself to the profession.

In carrying out this campaign the Ontario Medical Association will be living up to the best traditions of its founders. In this connection a quotation from one of the Canadian medical journals of 1882 may not be out of place: "The Ontario Medical Association should promote sentiments of mutual respect and fraternity, the plentiful lack of which there is still great reason to deplore." It is the intention of the present Executive to do what they can to remedy the faults existent in 1882 and that still survive in an attenuated state in 1915.

It is interesting here to note that the Association has been in existence since 1880 and has held meetings annually since 1881. Dr. Adam Wright and Dr. J. E. Graham first conceived the idea of a provincial organization. At a preliminary meeting held to consider the matter of organization were Drs. Workman, Covernton, Graham, J. H. Burns, Adam Wright and J. E. White. The first president was Doctor Workman. For thirty-five years the Association has prospered. There seems to be no doubt that the Executive, with the co-operation of the membership, will not allow the organization to languish even though under the stress of war conditions.

Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., *must be* in our hands by the first of the month previous to publication.

Reprints supplied at Net Cost

Original Contributions

PYELOLITHOTOMY IN AN UNUSUAL CASE OF RENAL CALCULI *

BY ARTHUR C. HENDRICK, M.A., M.B., F.R.C.S., (Edin.)
Assistant Gynecologist, Toronto General Hospital, Toronto.

History of the case: The patient, Mrs. H. æt. 44 years, was admitted to the General Hospital on June the 16th, 1915, and gave the following history. Married 24 years, two children, no miscarriages, always well until six years ago, when she began to complain of trouble in the left side. The family physician considered the condition as probably due to a moveable kidney and treated her for such, but without much success.

The symptoms would improve for a time and then return. The recurrences became more frequent, until almost every month the patient would have attacks of pain in the left side with nausea and vomiting and distress generally. Finally, during this year the condition became gradually worse, and on one occasion after travelling to Ottawa on the night train, she became very ill with pain in the left side and vomiting which necessitated her immediate return to her home. Also, on occasions, during the last three months the patient has noticed the urine smoky in color. I saw the patient on June the 7th, and found the following: Patient is confined to bed, has lost much flesh during the last few weeks, looks pale and worried.

Examination: Patient lies mostly on her back with the left leg drawn up. She cannot lie on the left side and has been unable to do so for some time. The patient complains

*Read before the Academy of Medicine, Toronto, March, 1915.

of tenderness in the costo-muscular angle and of pain radiating down the front of the thigh. This pain does not radiate upwards or across the abdomen. The abdomen moves badly on respiration. On palpation marked deep tenderness is elicited in the left renal area in front, and in the left costo-muscular angle posteriorly.

The right renal area was not tender and was not complained of, either now, or at any previous time. The fact that the patient has never had any trouble, and that nothing could be made out on the right side will be of interest when one examines the X-ray plates, since these show the right kidney completely packed with stones. The diagnosis of stone in the left renal pelvis was made, but before operation was advised, X-ray and renal efficiency tests were made. The skiagrams were taken only after thoroughly clearing out the bowel by the usual routine. The plate shows a small stone in the left renal pelvis, opposite the tip of the transverse process of the third lumbar vertebra, but also shows the right kidney pelvis filled with stones and the kidney substance atrophied. This was a surprise since there had never been any right-sided symptoms.

In order to confirm the findings of the X-ray, I asked Dr. Warner Jones to perform catheterization of the ureters and efficiency tests for me. Both ureters were catheterized and .6mg. of phenol-sulphone phthalein to each 1cc. of solution injected intravenously into the right arm, and the urine collected in test-tubes containing 25 p.c. NAOH, the patient having previously had plenty of water to drink.

The coloring appeared from the left ureter in six minutes, but no urine whatever was excreted from the right ureteral catheter. This showed the right kidney to be destroyed, thus confirming the skiagram. Forty-five p.c. of the phenol-sulphone phthalein was excreted in two hours, a fair average, since Kelly and Burnam in five cases of unilateral kidney give an average of 39.1 p.c.

Under the circumstances there was only one thing to do, viz., to remove the calculus from the functionating kidney. The question was as to the method best to employ.

Until recently, the operation of election has been nephrolithotomy, i.e., the usual lumbar incision to expose the kidney

and then incision of the renal parenchyma to open into the calyces and thus explore the renal pelvis.

The objection to this procedure is that one damages some of the renal parenchyma both by the incision and by the subsequent sutures and this is a serious affair when the patient has but one kidney, so it was decided in this case to perform a pyelolithotomy,—i.e., to remove the calculus through an incision in the pelvis of the kidney. The kidney was exposed by the usual oblique lumbar incision; the peri-renal fat was not increased in amount and there were no unusual adhesions. The kidney was readily brought out through the incision, lower pole first. The kidney was increased in size, evidently a compensatory hypertrophy. The posterior aspect of the renal pelvis was cleared of fat and on palpation a small stone was felt near the opening of the ureter. A small incision ½ inch long was made in the long axis of the renal pelvis, taking care not to injure any abnormal vessels, and a scoop passed down the opening for about 2½ in. when the stone was sounded and by manipulation lifted out of the wound.

Since the X-ray showed a single stone, nothing more was done in the way of exploration.

The wound incision in the pelvis was closed with No. 2 iodine catgut by Halstead's method of suture, no especial attempt being made to cover the incision by fascia. The kidney was returned to its "niche" and a small rubber drainage tube passed down to the lower extremity of the "niche" in case of oozing, and the rest of the incision closed in layers by iodine No. 2 catgut with a few tension sutures of silkworm-gut. The drainage tube was removed in 24 hours, a small strip of gauze left in another 24 hours, then everything removed. There was no leakage of urine and the drainage opening closed in 5 days. The wound healed by first intention and the patient left the hospital on July the 8th in good condition. She has been perfectly well since and is putting on weight, with no return of any of the symptoms.

Remarks:

I—The unusual history of complete destruction of the right kidney without any symptoms.

II—The rather great hypertrophy of the remaining kidney.

III—Of 38 cases of women in the Toronto General Hospital during the last five years, suffering from the symptoms of renal stone the following analysis was made:

19 cases were operated upon.
10 had stone in the right kidney.
7 had stone in the left kidney.
1 had stone in both kidneys.
1 no stone in either kidney.

646 Spadina Avenue, Toronto.

DISABILITIES,

Including Injuries Caused by Bullets, Shrapnel, High Explosives, &c., as Illustrated by Cases Examined before a Medical Board at Canadian Headquarters, Shorncliffe, England *

BY A. PRIMROSE, M.B., C.M., EDIN.,
Lieutenant-Colonel, No. 4 General Hospital (University of Toronto), Canadian Expeditionary Force.

(Continued from November issue.)

Fracture of the Jaws.—This is not uncommon and we have had numerous instances both by bullet and shrapnel. A few cases may be quoted to illustrate some narrow escapes. A man of twenty-two was struck by a bullet on the left nasal bone, it passed to the right, downwards and slightly backwards, and made its exit through the right malar bone. It severed the right infraorbital nerve and caused ectropion of the right lower eyelid. The explosive effect of the bullet caused permanent damage to the retina with loss of sight of the right eye. In another man a bullet entered below the anterior portion of the zygoma on the left side and traversing the facial bones made its exit on the right side of the face at a slightly lower level. The only damage persisting seemed to be some narrowing of the right nasal passage requiring some slight operation for his relief.

* Submitted to the Director of Medical Service, Canadian Contingents, and approved, August 23rd, 1915.

One man presented himself with a scar below the middle of the left zygoma; he produced a circular piece of metal one inch in diameter and one-quarter inch thick, possessing a screw thread on its edge. This had been found in the wound by X-ray and removed by operation. The circular piece of metal was no other than the cap on the top of a shrapnel shell. The only disability this man suffered was inability to completely open his jaws.

Scalp Wounds.—Flesh wounds from either bullets or shrapnel were of common occurrence among the men who came before us and not a few of these were in the scalp. In one case the soldier had twice narrowly escaped serious injury. He had two longitudinal scars on the top of his head, each was about three inches in length and they ran parallel to one another. One was caused by a bullet in April. The wound healed readily and on his return to the trenches he received the second scalp wound from shrapnel. Another case was that of a man who received a bayonet wound in the forehead. He was a lad of twenty-one, who told an interesting tale. He stated that a German attempted to bayonet him, but he knocked his rifle up and so received a glancing cut from the bayonet on his forehead. He then hit the German a blow on the chin with the butt of his rifle and the enemy started to run away. He then drove his bayonet into the man's buttock up to the hilt, and was unable to pull it out. Blood from the wound in his forehead now trickled down over his eyes and blinded him so that he had to be carried back to the dressing station.

5. Concussion of the Spinal Cord.—Several men gave a history which could only be explained by this type of injury. A man received a severe blow on the back from shrapnel causing immediate paraplegia. The paralysis lasted three or four weeks, after which he completely recovered the use of his limbs, but continued to suffer from nervous shock. Another case with a similar history was in the trenches when a shell burst and upset a number of sandbags on the parapet. These in falling struck the man in the back. He was knocked down and buried under the sandbags, and immediately became paraplegic. This cleared up in a short time.

6. Injuries to the Lungs.—We saw no cases of extensive laceration of the lungs such as would be caused by shrapnel; no doubt most if not all such cases prove fatal, but we encountered several instances of penetration of the lungs by bullets with recovery. We may cite two cases where the bullet must have traversed a considerable portion of lung tissue. Penetration of the right lung occurred in a man twenty-eight years of age. The bullet entered one inch below the outer end of the right clavicle; it passed downwards, backwards and inwards and made its exit at a point two inches to the right of the middle line where there is a vertical scar two inches long opposite the ninth and tenth dorsal spines. When we examined him two and one-half months after the injury he complained of pain radiating along the ninth intercostal nerve towards the middle line in front. The ninth rib was fractured posteriorly. He coughed up large quantities of blood immediately after the injury, but he made a complete recovery. Another remarkable case was that of a man of twenty-seven who was injured at St. Julien on April 22nd. A bullet entered his back at a point three inches to the left of the middle line above the tenth rib. It came out one inch external and two inches below the left nipple. He immediately spat blood in such quantities that he almost suffocated. He never lost consciousness, but his companions were sure he was dying, and being a Catholic the last rites were administered and his wound was not dressed. He survived, however, and was removed to the dressing station. He now presents himself in excellent health. He is a piper and he says he cannot blow the pipes at present because it causes him some pain in the left chest. On examining the scar in the front of the chest it is observed to pulsate, as the apex beat of the heart is immediately behind it. It is obvious that the bullet had passed in immediate proximity to the heart.

We are told that these cases of penetrating wounds of the lungs usually develop a hemothorax, but no evidence was present in these cases examined which suggested that there had been blood in the pleural cavity.

There were some cases of hemorrhage from the lungs following a severe crush without any penetrating wound. Thus

a man of the Princess Patricia's Battalion was buried under portions of the parapet which had been driven in upon him by a bursting shell. He was buried under the debris for twenty minutes and he at once coughed up blood in considerable quantities. The bleeding ceased, but he had a second very severe hemorrhage. The physical signs showed some evidence of a fibrosed condition of the right apex and possibly an old healed tuberculosis lesion had predisposed to the hemorrhage.

7. Wounds of the Chest Wall.—Here, as elsewhere, flesh wounds were common. One case illustrating a remarkably narrow escape was that of a man aged twenty-two, who was struck by a bullet on the front of the chest. He fortunately had a packet of letters in his right breast pocket. This contained a dozen letters and formed a pad an inch and a half thick. The bullet hit this packet and passing obliquely through it from right to left caused a wound which extended from the fifth right costal cartilage two inches from the sternum upwards and to the left, terminating over the second left costal cartilage close to the costo-sternal articulation. In its passage the bullet grooved a furrow out by the sternum. The explosive effect of the bullet caused some laceration of the lung tissue beneath as he spat blood freely for some hours after the injury.

8. Injuries to the Abdomen.—Flesh wounds of the abdominal parietes were exceedingly common, but we met with no case of penetration of the abdominal viscera. We are told from the front that these occur and remarkable recoveries are said to take place after penetrating wounds of the intestines by bullets. In this series of 819 cases not a single example was found, and if we judged from the great variety of injuries presented above we would be driven to the conclusion either that penetrating wounds of the abdomen are comparatively uncommon or that such wounds are much more frequently fatal than wounds elsewhere in the body.

9. Injuries of the Extremities.—(*a*) *Flesh wounds* are exceedingly common, often quite superficial and producing little or no disability. (*b*) *Injuries to bone.* Here we found great variety of damage. In one remarkable case a bullet had passed clean through the lower end of the femur, making a hole

in the bone, but not breaking the continuity of the femoral shaft. A large amount of callus was produced in the healing process, but the man recovered with little disability. Many instances of severe and comminuted fracture of the long bones were produced by shrapnel and bullet. The bones of the hand and less frequently of the foot were fractured, producing varying types of deformity and disability. (*c*) *Injuries to blood-vessels.* There were no important blood vessels severed in the series of cases presented. (*d*) *Injuries to peripheral nerves.* These formed one of the most interesting groups of the series, especially in the upper extremity. It seemed remarkable how frequently the injury was restricted to an individual nerve. One may cite a few examples. A man received a bullet wound of the left axilla and presented himself before our board with marked disability caused by paralysis of the circumflex nerve. The left arm was markedly elevated by contraction of the trapezius and adducted. The deltoid was completely atrophied and the man was absolutely unable to abduct the arm from the side. There was anesthesia of the skin over the deltoid. The disability was of course extreme. It is questionable if much could be done for his relief as in all probability a considerable segment of the nerve had been destroyed. Another man had a bullet enter the left arm on the antero-external portion about three inches above the elbow. It came out on the postero-internal aspect five inches above the elbow. There was no history to indicate that any important blood vessel was injured, but the median nerve was divided as indicated by the complete paralysis of the flexors supplied by it, the outer group of muscles of the thenar eminence and the loss of sensation over the portion of the palm and digits supplied by the median. There was one case where obviously there had been contusion of the ulnar nerve, but the paralysis when we saw the man was not complete. A bullet entered just above the condyles on the inner side of the arm posteriorly, and made its exit on the outer side. A flesh wound resulted and probably the bone was scraped. There was diminished sensation in the ring and little fingers, with hyperesthesia above the wrist on the inner side of the forearm, marked weakness of the interossei and inner lumbri-

cales, and the short muscles of thumb and little finger, but no complete paralysis. These cases of nerve injury are interesting and present difficulties in determining whether there is complete severance or merely contusion and raise the question as to the treatment which should be pursued as to operation or otherwise.

Many instances of remarkable escapes from serious injury were noted. Thus a man aged twenty-four had a bullet wound through the left axilla. The bullet entered just below the left coracoid process in front and traversing the axilla made its exit posteriorly just behind the posterior axillary fold on a level with the sixth dorsal spinous process. There was absolutely no disability or damage of any important nerve or blood vessel. In the lower extremity a man had a bullet enter the outer side of the left thigh two inches below the great trochanter and passing in front of the femur with a slight obliquity downwards it made its exit on the inner side, it then entered the right thigh and continuing the same direction came out on the outer side of the right thigh. There was no important vessel or nerve damaged and the disability was negligible. There were numerous joint injuries with varying degrees of stiffness and disability. One interesting case was due to severe injury to the right knee joint with severance of the anterior crucial ligament. The man was walking in the trenches when a sand bag fell on his thigh and knee, causing the injury. With slight force one could dislocate the tibia forwards and inwards. The disability was so great that he was considered unfit for further active service.

The object of these notes, which are much more extensive than the author originally intended, is to indicate the type of cases which come before a Medical Board and the important and responsible duties which are discharged by such an organization during active service.

Militia and Naval Medical Services and Ambulance

NOTES FROM SHORNCLIFFE

By Geo. S. Strathy, M.D. (Captain), Toronto.

Medical Work in a Concentration Camp.

An article in a London daily on the medical experience of the war remarked that medical treatment had been a great success, surgical treatment a great disappointment. What was meant was that epidemics, the dread of armies until this war, had been greatly curtailed, in fact hardly existed, while the wound from rifle fire, which was coming to be regarded lightly, was in this war of more serious consequence. Civil surgery has been progressing along the lines of asepsis. Military surgery must be antiseptic to be successful. At the beginning of the war, gangrene tetanus and sepsis generally were so common as to make the hospitals resemble those of the Franco-Prussian war of 1870.

In a concentration camp we see only the late results in surgery, that is only those who live to return to their lines; but we do have a chance to observe the results of sanitary science. In the Spanish-American and South African wars it was in the concentration camps that epidemics flourished. In this large camp, after four months, we have had one case of undoubted typhoid fever and about half a dozen doubtful cases. The doubtful cases were cases which run a moderate fever for a week or ten days without any characteristic symptoms, and this gets better. It is very hard to say if these cases are typhoid fever modified by a partial immunity conferred by the antityphoid inoculation. The Widal test is, of course, useless in inoculated

men. The one frank typhoid case had joined just previous to leaving Canada, and had not been inoculated.

Of pneumonia we had in May and June a considerable number of cases, and as so frequently seems to occur in an outbreak of pneumonia, a few men came down with cerebro-spinal meningitis. Altogether we had four cases of meningitis, three recovered, one died. The latter did not get any serum until late in his attack.

There was a very widespread epidemic of German measles in London, and about forty cases appeared in the camp. No patient was seriously ill, and there was not a single complication in any case. Mumps was epidemic in Canada, and we had some cases here for a short time after our arrival.

Diphtheria and scarlet fever have occasionally occurred, but in less proportion than in civil practice; but we have had in Moore Barracks Hospital twenty-eight cases of Vincent's angina. Many of these cases were acutely, but none seriously ill, and there were no bad after effects.

These, with a few cases of rheumatic fever in May, comprise all the cases that we have encountered of an infectious or epidemic nature, except venereal cases, which I shall mention later. Truly, medicine and sanitation have been a success in concentration camps. How many cities of 50,000 inhabitants could show a similar record?

Of cases returned from the front we have had two main types, those wounded and those suffering from nervous shock. The former are varied in the nature of their wounds, the most surprising feature being the wonderfully small damage done by bullets passing through or between important structures, such as the lungs and skull. The more severe functional nerve cases go to special hospitals, but the milder cases are very common here. For these mild cases complete rest in bed is essential, but by very slow degrees they return to normal.

Conditions in the Army are nearly ideal for specializing in medicine. The patients have no choice of their physician or surgeon, but have to go to whom they are sent. The medical men do not send their special cases to a specialist if they wish, and treat their special cases themselves if they wish; but they

must send their eye patients to the ophthalmologist, their venereal cases to the venereal hospitals, and so forth. Like the patients, they have to do as they are told. The consequence is the classes of special cases are very large, as a rule treatment requiring special training is given by men properly trained.

There is a high percentage of venereal infections, which is accounted for in many ways. War and frequent exposure to danger makes men reckless. In besieged cities men and women tend to become reckless and loose in their morals. The life of the men must needs be monotonous; they are away from all home restraints, and in uniform a man to some extent loses his identity, and often, consequently, some of his self-respect. In other respects the behaviour of the men has been excellent.

The new surgical problems have arisen mostly in regard to sepsis and high explosives. At an English concentration camp one has little opportunity to study them, so I must postpone any description until we arrive closer to the front.

THE STUDY OF ALCOHOL

The American Society for the Study of Alcohol and other Narcotics will hold its forty-fifth annual meeting at Washington, D.C., Dec. 15th and 16th, 1915.

This was the first society of medical men in the world to take up the scientific study of alcohol and other narcotics. Its papers and transactions have been published in the *Journal of Inebriety,* and comprise the first scientific literature on this subject.

Thirty-one papers will be read at this meeting by specialists and distinguished medical and scientific men. These presentations will be confined exclusively to the effects of alcohol and drugs on the body and brain, based on laboratory and clinical experience and observation.

The public are cordially invited to be present. Programmes can be had by addressing the Secretary, Dr. T. D. Crothers, Hartford, Conn.

Correspondence

The Editor cannot hold himself responsible for any views expressed in this Department.

COMPETITION WITH GERMANY AND AUSTRIA-HUNGARY

The following letter from Oppenheimer, Son & Company, Limited, of London, England, will explain itself. We are sure that the Canadian profession will appreciate and take advantage of the situation.

Dear Sir,—We are constantly reminded by the Board of Trade Commercial Intelligence Branch that it is desirable at the present time for all British manufacturers to displace as far as possible, by keen competition, those products that have hitherto exclusively been made by the two enemy countries referred to, and as we are an entirely British house having, in common with our universal trade, manufactured a number of products for pharmacists and the medical profession in Germany and Austria-Hungary prior to the war, we think it an opportune time to take up these products in direct competition against their exports to British dominions and foreign countries, by specially advertising to the medical profession and chemists in this country that we are able to manufacture and have done so for years past.

The Colloids of metals that have been introduced especially from Germany under various trade-mark names and patented processes protected in this country and other British possessions, are undoubtedly well-known, and when we noticed the large volume of business done in these goods and thus a desirability of their being made more stable and regular in constitution, so that they would not become deteriorated when kept for a reasonable time, we decided to have experiments made to develop a product of the Colloid nature that would answer these requirements and we succeeded in doing so. British Collosols are better than German Colloids of Silver and other metals.

Collosols are now universally employed with success in the treatment of diseases or wounds due to the destructive action

of various bacteria. Collosols are non-irritant to wounds and operative work, and they promote quick healing in cuts and sores. Recommended in septic ulcers, foul wounds, ringworm, gonorrhœa and persistent suppuration, vide *Lancet* 1-12-322.

Marienbad Pulverettes. These are shaped as tablets, coated with sugar or chocolate. This formula was originated by the physician to Abbott of Tepl. The Spa treatment there was a very popular one with patients from all countries in Europe, and we are advised that the use of the British Spa and the use of the Saline treatment given on the British Spas with the regular administration of the Marienbad Pulverettes are quite equal to the Continental treatment.

Our Thymotussin is made with various species of Thyme, and is the product that has been found for some years past to be the most effective treatment in whooping cough, the principal necessity being that the preparation should be made with the fresh green herbs.

We solicit therefore your kind interest and support in carrying out this competition, so that we shall be able to displace for the British-made products (All our preparations are and have always been manufactured at Kennington, London) those originated from the enemy countries, manufactured as nearly as we are able, and fully approved of. Specimens of any of these products will be willingly sent free of charge upon application being made on the enclosed post card.

Yours faithfully,

OPPENHEIMER, SON & CO., LTD.

EYE-TESTING?

Toronto, Sept. 24th, 1915.

To the Editor of The Canadian Journal of Medicine and Surgery, Toronto:

Dear Sir,—Retail opticians in Toronto, who advertise "eye testing," have been severely criticised by some physicians for invading what they regard as their exclusive territory.

May I point out that some of these physicians have helped to bring about the conditions which they object to by failing to properly support the retail opticians who are desirous of doing

a strictly "prescription business." Some of them actually send their prescriptions to the manufacturing and wholesale concerns.

It is scarcely to be wondered at, under such circumstances, that many opticians have of necessity almost qualified themselves to do refraction. OPTICIAN.

[There is something in what "Optician" states. The complaint made is true here and there, when sufficient care does not seem to be used in directing the patient to "prescription opticians" and preventing them from falling into the hands of a certain class of so-called opticians, who openly carry on a "refraction department" and are daily robbing our oculists of fees. Doubtless the above letter will be all that is necessary to materially remedy matters.—*Ed.*]

CANADIAN BOWLERS AND THE WAR

AT a meeting of the bowlers held at the Granite Club, Toronto, on October 8th, it was unanimously decided to raise funds for the carrying on of the work of the Militia Department of the Y. M. C. A. This certainly gives every bowler in the Dominion a splendid opportunity of subscribing to *a work that always gives returns* and, as there are a large number of physicians who are bowlers, we would suggest that they communicate with Mr. Charles McD. Hay, President of Messrs. Lyman Bros. & Co., Toronto, enclosing a cheque as their subscription toward this splendid work. A great many physicians have sons and relatives who are to-day fighting in the battle for liberty and justice and, though all have, no doubt, already helped with money to some fund in connection with this terrible European struggle, they cannot spend a further sum any better than in helping the Militia Department of the Y. M. C. A. to get into closer touch with the men in the field. The committee will greatly appreciate hearing from physicians.

Personals

Dr. Oliver Mabee, of Toronto, has been appointed, temporary, and in the absence of Prof. J. J. MacKenzie, at the front with No. 4 General Hospital (University Base Hospital), Professor of Pathology at The University of Toronto.

Capt. W. R. Philip and Capt. Pentecost, of Toronto, both of whom left for the front early in the war with No. 2 General Hospital, have each been gazetted to the rank of major.

The University of Toronto Base Hospital No. 4 General Hospital is now located at Alexandria, Egypt, having reached there late in the month of October. We send our congratulations to Col. Roberts in his recent promotion to Surgeon-General.

Lt.-Col. W. T. Connell, Bacteriologist at Queen's University, Kingston, reached home from the front recently. He will remain in Kingston for the college term.

We regret to learn that Mrs. H. J. Hamilton, wife of Lt.-Col. (Dr.) H. J. Hamilton, is, at the time of writing, seriously ill and confined to Wellesley Hospital. We earnestly trust that she will make a rapid and normal recovery.

Lieut. (Dr.) H. F. Mackendrick, of Galt, recently attached to the Royal Army Medical Corps, returned late in October from the firing line. Lieut. Mackendrick was Surgeon-in-Chief to No. 31 Casualty Clearing Station, located about eight miles behind the British lines in France. The doctor had to return to Canada owing to serious illness on the part of his wife.

Obituary

DEATH OF DR. AUSTIN FLINT

Dr. Austin Flint, one of the most widely-known physicians and surgeons in the country, and an alienist of international prominence, who was a conspicuous figure in the Thaw case, died of apoplexy at his home, New York City, on September 22nd. Dr. Flint was preparing to leave his home for a walk when he was stricken and fell dead upon the floor.

Dr. Flint had been in failing health for several months, but despite his advanced age his family felt little apprehension on his account.

Dr. Flint was born in Northampton, Mass., on March 28, 1836. His father, Dr. Austin Flint, was a physician of note in this city for many years. When Dr. Flint was a boy his parents went to Buffalo, where he was educated in a private school, later going to Harvard, from which he was graduated in 1853. He studied medicine in the University of Louisville in 1854, and in 1857 he received his degree of doctor of medicine from the Jefferson College.

Returning to Buffalo, Dr. Flint practised medicine from 1857 to 1859, and during this period he served as editor of the *Buffalo Medical Journal,* which post he relinquished on account of his increasing practice. He was professor of physiology in the medical department of the University of Buffalo from 1858 to the latter part of the following year, and in the same period he was visiting surgeon to the Buffalo General Hospital.

Dr. Flint was one of the founders of Bellevue Hospital Medical College in this city, and from 1861 to 1898 he was professor of physiology at that institution. From 1862 to 1868 he was professor of physiology at the Long Island College Hospital, and in 1898 he became professor of physiology in the Cornell University Medical College.

It was while he was visiting physician to the insane pavilion of Bellevue Hospital in 1896 that he began the study of insanity and its causes, which ultimately was to make his name famous as an alienist. He was consulting physician of the Manhattan State Hospital for the Insane in 1896, and three years later he became president of the Consulting Board. He was a member of the Executive Committee of the New York Prison Association of the State and New York County Medical Societies, the American Academy of Medicine, the American Medico-Physiological Association, the Academy of Natural Sciences of Philadelphia and of the Century and Athletic Clubs.

He was a prolific author of books on medical subjects. These include "The Physiology of Man," in five volumes, now in its second edition; "Physiological Effects of Severe and Prolonged Muscular Strain" (1871); "Text-book of Human Physiology" (1875-88), and "Hand Book of Physiology" (1905). In addition to these Dr. Flint was author of many articles on medical and physiological subjects in medical periodicals.

DEATH OF DR. ADAM LYND

Dr. Adam Lynd died at his home, 70 Howard Park Avenue, Toronto, on September 30th. He had been ill for several months, and took a turn for the worse about a week before.

Dr. Lynd was born in Aurora, Ont., seventy years ago, and graduated from Trinity Medical College, after which he practised medicine in Toronto for thirty-five years. A Liberal in politics, he was always interested in civic affairs. He served as Mayor of Parkdale for three consecutive years, holding that office at the time of annexation to the city. Later he was a member of the City Council for several years, having served as alderman for Ward 6. He was a member of the A. O. U. W. and Dunn Avenue Presbyterian Church.

The Physician's Library

Fever, its Thermotaxis and Metabolism. By Isaac Ott, A.M., M.D., Professor of Physiology, Medico-Chirurgical College, Philadelphia, 168 pp. Illustrated, 5 x 7 inches. Paul B. Hœber, New York, 1914. Price, $1.50, net.

This book is a splendid review of the experimental results of many workers on the problems of fever. It contains much of the author's own experience. Especially to be noted is the discussion on the most important contribution to the subject by Lichachuff and Avoroff. To one who studies a particular branch of a subject by the method of physiological experiments on the general subject this book is extremely valuable.

A Clinical Manual of Mental Diseases. By Francis H. Dercum, M.D., Ph.D., Professor of Nervous and Mental Diseases, Jefferson Medical College, Philadelphia; Consulting Neurologist of the Philadelphia General Hospital; President of the Philadelphia Psychiatric Society; Ex-President of the American Neurological Association and of the Philadelphia Neurological Society; Foreign Corresponding Member of the Neurological Society of Paris and of the Neurological and Psychiatric Society of Vienna; Member of the Royal Medical Society of Budapest, etc., etc. Philadelphia and London: W. B. Saunders Company.

Professor Dercum in this work has presented the clinical manifestations of the various forms of mental disease as they will appear to the general practitioner, and his aim is rather to instruct and qualify the student to practically direct the management of mental illness than to represent the academic doctrines and controversies. He considers insanity in its relation

to the prominent epochs of life, as puberty, adolescence, adult age and senescence, and also in its relation to the various diseases of the visceral organs, physiological conditions, as pregnancy and lactation, and to intoxications and disorders of metabolism. The author also has a very interesting account of insanity by contagion which is rarely mentioned in works on this subject, and his observations are helpful and sound. "The mystic paranoic," he says, may be "a man or woman of powerful personality, of force, of natural eloquence and of convincing manner. Under such circumstances he not infrequently secures a following, and one too that may grow to huge proportions. One need hardly mention the divine healers who arise in every age and in every country, nor speak of those who actually found new faiths and creeds. Mystic paranoia is a danger that is real, grave and insidious. The unknown, the mysterious, the occult inspire awe and dread; they also weave a hypnotic spell, they bind in hopeless impotence, chain in blind fascination the simplest workings of the mind. The everyday facts of life and of existence are denied and absurd delusions substituted. Realities are hallucinated away and replaced by the intangible figments of mental disease. The communicated madness so arising may become epidemic and may last for centuries."

The chapters on the Psychological Interpretation of the Symptoms and on treatment are excellent, and altogether the volume of a little over four hundred pages will afford an interesting and reliable guide to any member of the profession who may acquire it. N.H.B.

Selected Addresses—on subjects relating to Education, Biography, Travel, etc., by James Tyson, M.D., LL.D., Professor of Medicine *Emeritus,* University of Pennsylvania. Philadelphia: P. Blakiston's Son & Co. Price, $1.75.

In this volume Dr. James Tyson has presented to the Profession a series of addresses of the greatest interest. These addresses include such subjects as Memoir of William Pepper, M.D.; Memoir of Albert Holmes Smith, M.D.; Requirements

of a Modern College Education; The General Practitioner; Hospital Organization; The Trained Nurse, and a Review of the Progress of Medicine during the last half-century, 1863 to 1913. The book is one that should be in the hands of every physician, and makes most interesting and instructive reading, helping to while away an evening hour.

The Invalid and Convalescent Cookery Book. By Alys Lowth. Longmans, Green and Co., London. 1s. 6d. net.

This book, of about 120 pages, is in binding suitable for kitchen wear, and in good clear type. It is quite up-to-date in its information about the latest kinds of utensils, such as the Thermos flask. If an invalid must have a diet from which certain elements are to be banished, the nurse will have to possess a knowledge of dietetics independent of this book, since it simply classifies the recipes into groups according to their kind, soups, entrées, game, etc., whereas one might work more easily if it were arranged as follows: pure proteids, pure carbohydrates, a well-balanced diet, a salt-free diet, etc. Otherwise, the subject matter is good, and there is a very great deal of sound wholesome advice interspersed throughout.

The Adjuster's Manual for the Settlement of Accident and Health Claims. By C. H. Harbaugh, M.D., Philadelphia. Pa., Expert Examiner and Adjuster, Fellow American Medical Association, Medical Director American Assurance Company. Price. $2.50. Second edition, enlarged, entirely rewritten and illustrated. The Spectator Co., Chicago and New York.

It must be most gratifying to the author to find in so short a time the necessity for a second edition of this most useful little volume. This edition has been entirely rewritten, and many new articles added. Perhaps we cannot express ourselves better than to say that The Adjuster's Manual should prove of the utmost service to those in the insurance business who have charge of the adjusting of accident and health claims.

The Starvation Treatment of Diabetes, with a series of Graduated Diets as used at the Massachusetts General Hospital. By LEWIS WEBB HILL, M.D., and RENA S. ECKMAN, Dietitian, with an introduction by RICHARD C. CABOT, M.D. Price $1.00. W. M. Leonard, Publisher.

This book furnishes to the general practitioner in compact form the details of the latest and most successful treatment of Diabetes Mellitus. It presents the clinical application of the work done in recent years by Dr. Allen at Harvard and The Rockefeller Institute.

This method of treatment, carried out by Dr. Allen at The Rockefeller Hospital, and by the Staff at the Massachusetts General Hospital, has proved very successful. As Dr. Cabot states in the introduction, "It seems already clearly proven that Dr. Allen has notably advanced our ability to combat the disease. * * * To all who wish to give their patients the benefit of this treatment, I can heartily recommend this book." In a recent address Dr. Allen said: "However specialists may feel, there is no doubt that a majority of average practitioners feel bewildered and helpless concerning Diabetes."

To all who have been tried by this baffling disease, this little volume, with its description of Treatment, Tests and Diets, will be of great service. W. J. W.

A Compend of Medical Chemistry, Inorganic and Organic, including Urinary Analysis. By HENRY LEFFMANN, A.M., M.D., Professor of Chemistry in the Woman's Medical College, Pennsylvania, and the Wagner Free Institute of Science. Sixth edition, revised. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

This is a convenient little work, giving the student the essentials in short form, and designed to save him the taking of notes. W. J. W.

AN IDEAL RESORT FOR CONVALESCENT PATIENTS

PHYSICIANS have frequent opportunities of referring those convalescing from illness to a resort where they can quickly recover their old-time vigor and enjoy an almost ideal climate, 2,500 feet above sea level. Such a resort is Virginia Hot Springs, just one night out of New York. The management have spent a huge sum of money on this choice spot in "Old Virginny," and are anxious that the Canadian medical profession should continue to refer cases there, as they have done in years gone by. The Homestead Hotel is one of the handsomest houses in America. It is built of solid brick, containing 500 guest rooms, with many parlor suites and 300 private baths. It is spacious, dignified, quiet and restful, with magnificent mountain views on every side. It is no exaggeration to say that Hot Springs means the Homestead Hotel. The Company owns 5,000 acres surrounding the hotel, so that physicians can understand that their patients have every opportunity of enjoying outdoor life and regaining thereby their normal strength.

The dominant factor making Hot Springs world-famous is the cure in which the climate as well as the water assist. The waters are conducted by gravity to the bathhouse and distributed fresh from the ground to the bathing apartments on different floors without loss of heat or its increase by artificial means, and fully charged with all their gases and other health-giving qualities. At none of the celebrated places in Europe, and at no other springs in America, is the temperature prescribed for hot baths that at which the water actually emerges from the earth in the natural springs.

The springs are beneficial, not only for bathing, but for drinking. Besides the hot springs, the effects of which as drinking waters are pronounced, there are magnesia, sulphur, and soda springs within the grounds, and alum water from a spring not far distant. The water from the soda spring comes strong and clear from the ground at a uniform temperature of 74 degrees. Physicians should address for full information H. Albert, Esq., Hot Springs, Va., U.S

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